Drug Markets

June 1929

Established 1914

The Magazine of the Manufacturing Drug Trade

Editorials 537

Nothing But Confusion—Pharmaceuticals and Proprietaries—A Merger Needed—Price Maintenance Losses—The Colored Glass Problem—Sauce for the Goose—Increasing the Menthol Tariff

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Coming Issues

The Drug Industry is gradually coming to realize that the changing methods of administrating the Food & Drugs Act will keep them in a constant state of confusion and chaos. The various groups into which the industry divides itself are all feeling the effects of these conditions.

Slowly but Surely there is developing a wave of resentment that is certain to make itself felt. Concerted action by at least some of these groups to obtain a different method of administration is not far off.

In the Proper Direction the drug manufacturing industry must be allowed to prosper and grow. While it is true that no false sense of security must be given by drug manufacturers, there is no reason why well established facts should be totally disregarded by one individual.

This Situation will receive full and frank discussion in coming issues. The methods of the Department of Agriculture and the opinions of the trade will be given.

VOL. XXIV **DRUG MARKETS, INC.** NUMBER 6

PUBLISHERS

Publication Office, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 25 Spruce St., N. Y. City

Editor	President	Business Manager
THOMAS R. FARRELL	WILLIAMS HAYNES	FRAZER V. SINCLAIR

PUBLISHED MONTHLY AT PITTSFIELD, MASS., SUBSCRIPTION PRICE, TWO DOLLARS A YEAR, IN ADVANCE, POSTAGE PAID TO ALL COUNTRIES; THREE WEEKS' NOTICE IS REQUIRED TO CHANGE SUBSCRIBER'S ADDRESSES, AND WHEN NOTIFYING KINDLY GIVE BOTH OLD AND NEW ADDRESSES. PRINTED BY THE SUN PRINTING COMPANY, PITTSFIELD, MASS. ENTERED AS SECOND CLASS MATTER, JANUARY 1, 1928 AT THE POST OFFICE, AT PITTSFIELD, MASS., UNDER THE ACT OF MARCH 3, 1879.

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Soda Ash
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Benzoate of Soda
Benzyl Alcohol
Benzaldehyde
Ethyl Vanillin
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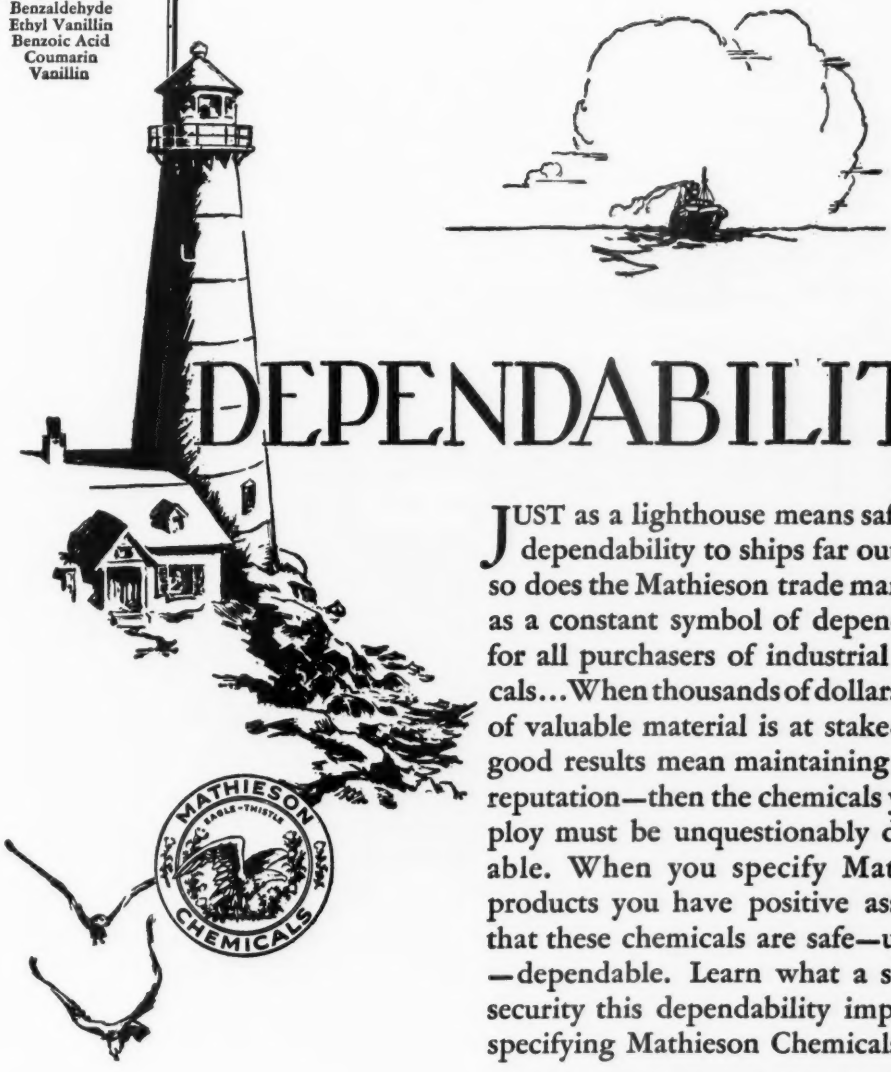

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Other important factors must also be considered such as the possibility of the product discoloring, proper fixation or unfavorable reaction between the various component parts. These problems and their solution form a very important part of our service to the Manufacturing Perfumer.

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¶ Perhaps you, as a manufacturer, have a sealing problem that can be solved best by using tapered corks. In that case, or if you are already using tapered corks, allow us to send you generous samples of BOUCHER Corks for your approval. Simply write to *Tapered Cork Department, Cork Import Corporation, 345 West 40th Street, New York City.* No obligation, of course.

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IN selecting Alcohol the strictest standards necessarily are observed. That is why many manufacturers give preference to "Everclear" Alcohol, whose reputation for purity has long been established.

This highly satisfactory quality is maintained by distillation in our plant in the grain territory . . . by an exclusive process originated by us.

The superiority of "Everclear" is attested by exacting usage over a period of many years. It is odorless, colorless . . . . a product of unvarying quality.

This is number 4 of a series depicting historical periods in the development of America

THE English King incorrectly estimated the spirit of the American Colonists. The final break came with the passage of what the Colonists termed, "The Four Intolerable Acts" . . . reparation for the "Boston Tea Party," and submission to England; transfer of governmental powers to the English military commander; the Transportation and the Quebec Acts. Fortunately for America, the wise and strong Washington led the often ragged and hungry Continental armies . . . and to ultimate success.

ALCOHOL EVERCLEAR ALCOHOL
REG. U.S. PAT. OFF.

"SEE AMERICAN FIRST"
COMMERCIAL ALCOHOL CORPORATION
420 Lexington Avenue, New York, N. Y.

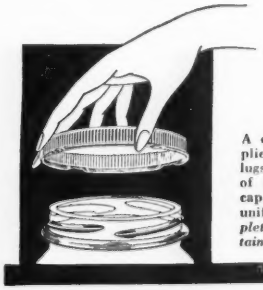
Plants:
Pekin, Ill. Philadelphia, Pa. Sausalito, Cal. Gretna, La.

—and use modern methods!

In these days of keen package competition for the consumer's eye and approval, no one can afford to neglect an opportunity to make his package more attractive. Amerseal Caps lithographed with your own design in colors to harmonize with the rest of your package, offer one modern method of making your package stand out effectively on the druggist's counter or shelf.

But these efficient closures have many other qualities of importance well-worth consideration. When package contents are used a little at a time Amerseal Caps are the logical closures. They're easily opened—easily closed. A quarter turn removes them. They do not "gum" or stick. Another quarter turn and the jar is quickly, easily and effectively reclosed. That's a thing women appreciate!

And, because they can be so speedily and easily applied, either by hand or machines, Amerseal Caps cut costs in the packing operation. Most of our customers find that in spite of their many points of superiority, they cost no more than ordinary closures. It will pay you to get all the facts on Amerseal Caps. A brief note on your business stationery will bring the full story promptly.



A quarter turn to the right applies the Amerseal Cap. The lugs, formed to fit the contour of the glass threads, draw the cap down and effect a tight uniform contact *around the complete circumference of the container finish.*

THE AMERSEAL CAP

AMERICAN METAL CAP COMPANY

2 Summit Street, Brooklyn, New York

Eighteen Branch Offices to Most Efficiently Serve You

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National Insect Killing Week. July 7th to 13th

Proper packaging will go a long way toward encouraging the public to use ever increasing quantities of insecticides.

Race-icide or Insecticide?

IF all the little insects were allowed to live and reproduce normally, it would not be so very long before the human race would be having rather an unpleasant time.

But thanks to civilization — and insecticides — the human race is doing nicely. And Insect Killing Week will serve to challenge and check any negligence in safeguarding human interests from low forms of life.

Do our part? Certainly. We make every effort to produce efficient, safe-and-sane containers. Have our representative show you what Canco packages do to boost sales for insecticide manufacturers. Have him submit designs that will draw interest to your brand.

AMERICAN CAN COMPANY

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METAL SIGNS AND DISPLAY FIXTURES

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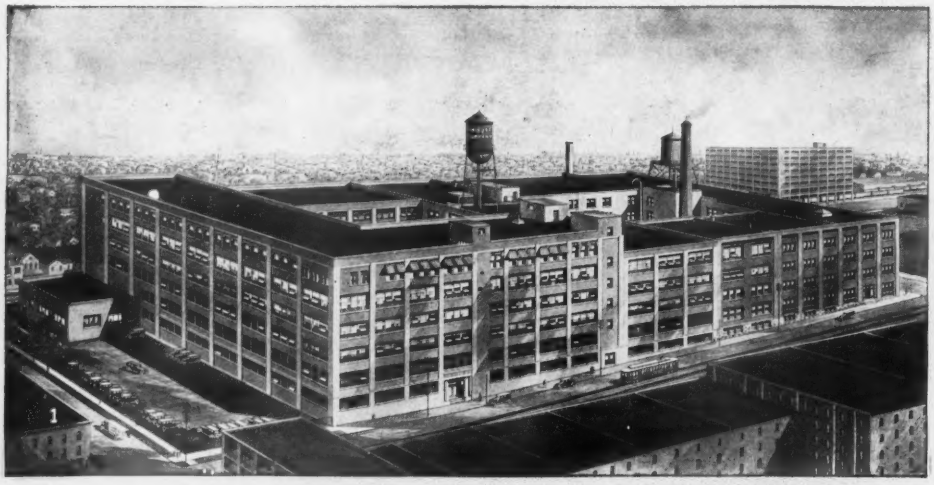

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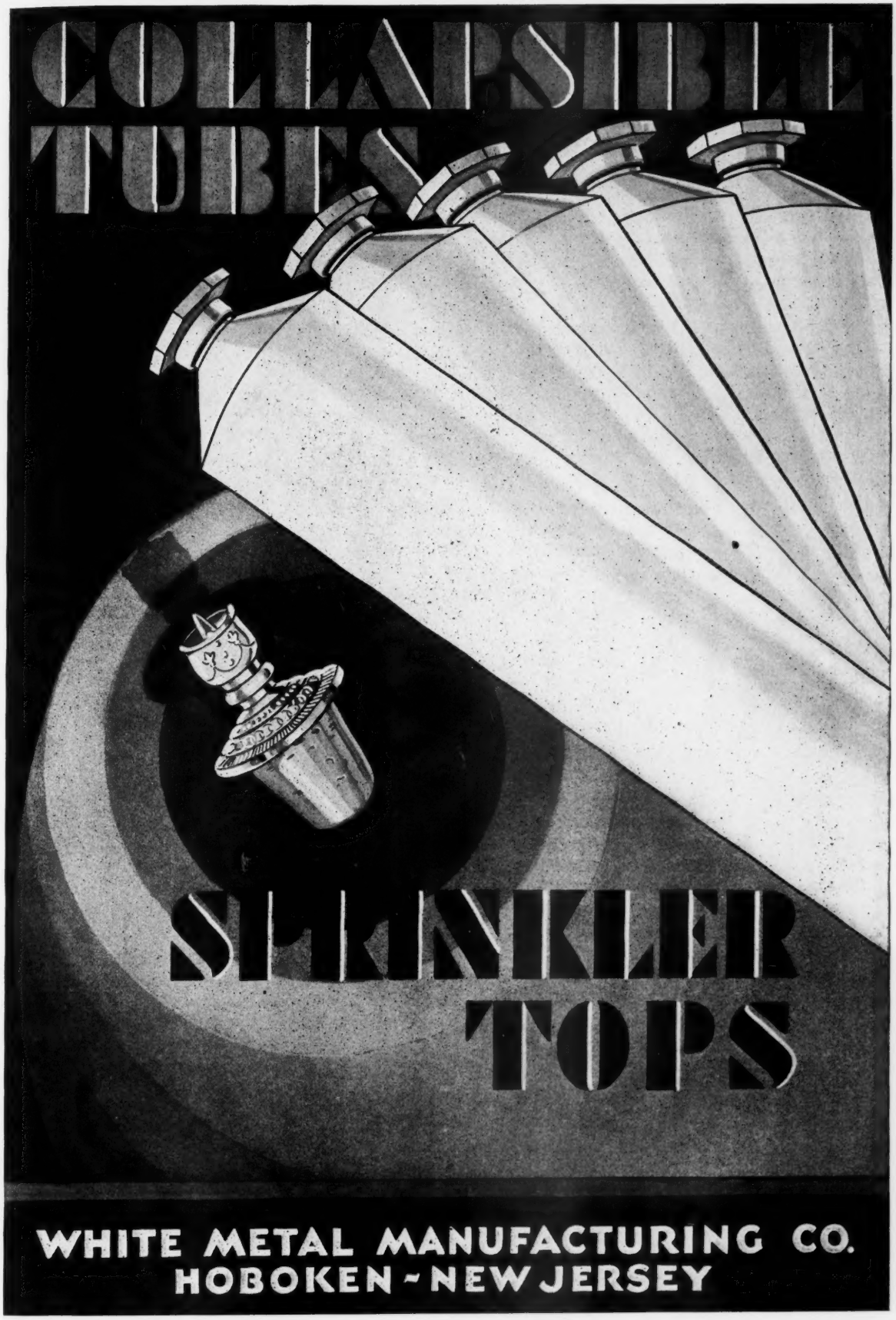
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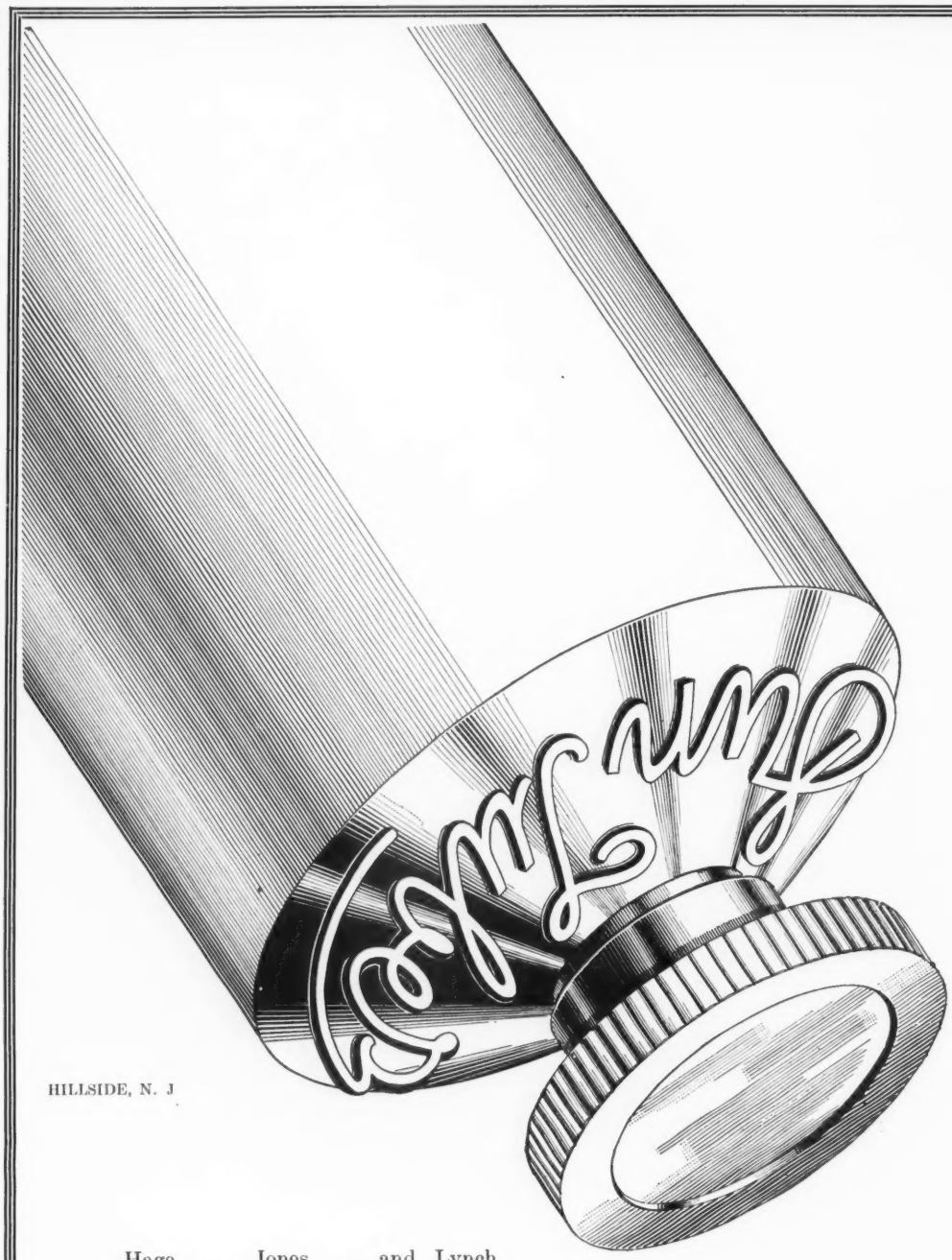
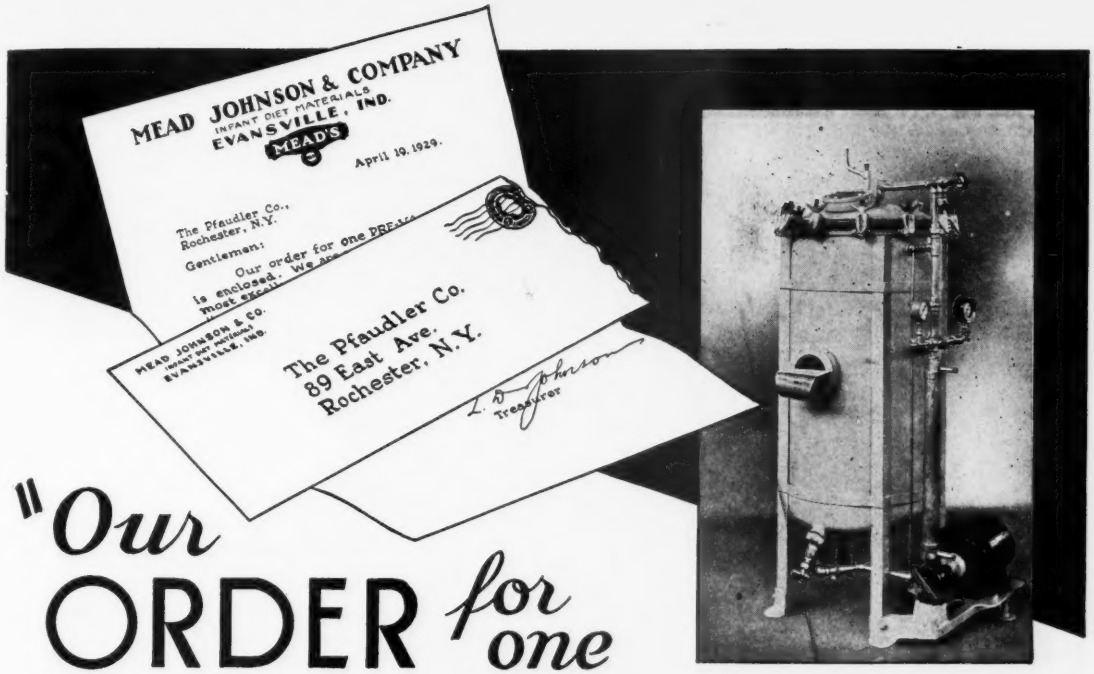


HILLSIDE, N. J

Hage . . . , Jones . . . , and Lynch . . . , having gotten together . . . , on a filler, a cartoner, and a *Gun Tube* . . . , for a pet account . . . , we are out to sling tubes at more than one hundred per minute.

P. S. . . . , and if Hage and Jones . . . , ever go into high . . . , *Gun Tubes* will be . . . , awaiting!

Frank J. Lynch
Pres.



"Our ORDER for one PRE-VAK, Jr. PERCOLATOR is enclosed"!

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The "Pre-Vak, Jr.", based on the pressure-vacuum principle of extraction, *has proved* the most efficient of percolation methods. It is air-tight and prevents evaporation of alcohol. It eliminates channeling. It is glass-lined and prevents metallic flavors. It requires no temperature, except for repercolation of the same beans.

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In addition to its use for the percolation of vanilla extracts, the "Pre-Vak, Jr." may be used for the percolation of roots and herbs. Bulletin No. 704 explains everything in detail. Send for it!

"The percolators manufactured by you have proved highly satisfactory," say the Allied Drug & Chemical Co., New York City, users of these four 300 gallon Pfaudler Tilting Percolators.

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Gentlemen: Please send us Bulletin No. 704 describing your "Pre-Vak, Jr." Percolator.

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Recently that was the case in the lacquer and artificial leather industries. Both found further expansion difficult. And simply because a new and different solvent was needed to fit their products for potential users.

U. S. Industrial Alcohol chemists studied the situation—experimented—then produced an improved quality of Ethyl Acetate that enabled both industries to meet the requirements of a new and wider market.

We could cite scores of similar instances. For, opening new markets and increasing the scope of old ones is really the function of our laboratories. Literally thousands of alcohol-chemical products originate here for the benefit of American business.

Such are the resources and facilities of this company, that practically any quantity of any alcohol product can be supplied to any customer at any time. And such are production standards, that every shipment of each product is identical in quality.

Write for your free copy of our recently revised booklet, "Solvents." Many industrial firms find it exceedingly useful. Very likely you will too!

Often great industrial changes originate in these prosaic tubes of glass. They are the tools of chemistry . . . the "open sesame" to wider markets, greater profits.

U. S. INDUSTRIAL ALCOHOL CO. **U. S. Industrial Chemical Co., Inc.**

110 East 42nd Street, New York

The Survival of the Fittest

HERE are some of the products and packages of *Yourr* Chemical Corporation.

They represent the quality raw materials and packaging supplies bought by *Yourr* Purchasing Agent . . . the technical knowledge and packaging experience of *Yourr* Production Man . . . the judgment and direction of *Yourr* Sales Manager, Advertising Manager and General Manager.

Into the market places of the world these products go, unashamed to stand shoulder to shoulder with the best of competitive wares. No detail of preparation or packaging has been slighted that they may win out in the competition which is to be theirs. For the market places of the world know . . . accept . . . but one immutable law, "The survival of the fittest."

PHOENIX
Metal Caps
The C T CAP

THE C T CAP is a continuous thread, resealing type of closure.

The glass finish it requires is standard (G.C.A. No. 400) and consists of a single low pitch thread which extends entirely around the neck of the package. This gives all-round contact between glass and cap and equalizes strain on the glass finish.

Easily applied by machine or by hand, and as easily removed. Little more than a quarter-turn is required to effect a seal.

Furnished with liners for sealing a variety of products. It may be attractively decorated with solid coatings, translucent lacquers or lithographed in any design or color to harmonize with your package.

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Metal Caps for Glass Packages

CHICAGO NEW YORK

Offices: Rochester, Philadelphia, Boston, San Francisco, Los Angeles, Cleveland, Cincinnati, St. Louis
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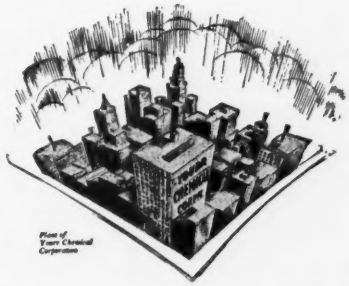

**Yourr* Chemical Corporation is purely a creation of the imagination. Its buying, manufacturing and sales problems, however, are very likely to be similar to the problems of *your* chemical corporation.

Articles about *Yourr* Chemical Corporation will appear each month in this publication. If you have missed any of the previous articles in this series, we will supply reprints together with a booklet describing the plan and purpose of this hypothetical organization.

Write the Promotion Department of Phoenix-Hermetic Co. The address is 2444 W. Sixteenth St., Chicago.

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You would not build a modern hotel without architect's plans---

It is equally essential that cosmetic perfumes be constructed on a scientific basis.

It is the function of our Service Laboratory to create and build odors for you that are---

Scientifically Correct

for

Perfumes - Creams - Soaps - Disinfectants
etc., etc.

Permit us to help you with your perfuming problems

GIVAUDAN-DELAWANNA, Inc.

101 Fifth Avenue, New York, N. Y.

LARGEST MANUFACTURERS OF SYNTHETIC AROMATIC MATERIALS IN AMERICA

WE have seen the collapsible tube instantaneously formed in a flow of fluid metal around the punch. The open end of the tube, through which it is filled, has not been trimmed, the thread has not been turned, and the hole at the filling end has not been cleared.

These operations are performed simultaneously. As the tubes revolve on a mandrel, a disc trims the filling end, the opening at the extruding end is trimmed smoothly, and a thread is cut in the neck. One coordinated operation, all of which takes place during one horizontal revolution of the tube.

We now have a completely manufactured, undecorated collapsible tube, lacking only its cap to be ready for immediate service.

Its structural strength, its utility in filling and as a future container depends upon the distribution which has been made of the metal.

The Sheffield Process, by which we mean an exact control over every operation and every factor contributing to each operation, carefully guards this distribution of tin. No better guarantee of a properly made collapsible tube, economical to the buyer in that he receives full value for every fraction in weight of tin used, can be given.

This is one of a series of advertisements to better acquaint you with the methods of manufacturing collapsible tubes.

NEW ENGLAND COLLAPSIBLE TUBE COMPANY

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Phone: New London 5319

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Drug Markets

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Nothing But Confusion

WHILE we are not surprised that Dr. J. J. Durrett thinks differently on the question of antiseptics and germicides than did his predecessor in the office of drug control official, we are indeed surprised in the manner in which he differs. The entire drug trade was quite recently educated to the fact that the public conception of antiseptic was a product that killed bacteria—in fact a germicide. Merely because the dictionary differed on the definitions of these two types of products —giving antiseptic as an inhibitor of germ growth and a germicide as a germ destroyer—did not matter: the public thought them both the same. Therefore, ruled the department, a product labeled "antiseptic" must in fact be a germicide.

BUT, strange to say, Dr. Durrett has no such ideas. His statement made before the members of the American Pharmaceutical Manufacturers' Association contended that the department "does not think the dictionary is wrong." Going on to explain just what he meant, the Doctor stated that when an antiseptic was of such a type or was used under such conditions as to be applied over a long period, a product that merely inhibits the growth of germs may be labeled "antiseptic." In the matter of oral products, however, the user is in a hurry, he only washes his mouth for a minute or so. Therefore, states the Doctor, all products used in oral antiseptis must be germicides before they can be labeled "antiseptic."

WE VERY well know that the industry accepted in good grace the former ruling of the department. They could see no objection to labeling products in keeping with the public conception. They immediately accepted the department's ruling in the spirit in which it was made. But now after changing all their labels in one direction, certain of them may be changed back to where they were. According to the present enforcement official there never was any reason why certain of these labels should have been changed.

IT IS just this sort of thing that makes a different type of regulation drug products imperative. To think that two men can not only differ on such a simple case, but can go so far as to enforce their own personal views and thus cause unnecessary embarrassment and trouble to reputable manufacturers, is too much.

THE way to stop this sort of thing, but at the same time not weaken the enforcement of the Food and Drugs Act, is to change the method of its administration. The secretaries of agriculture, treasury and commerce can change the method. They can, if they so desire, have label statements interpretated by a board on which will be represented all schools of medical opinion, all of the branches of manufacturing pharmacy, and the public through the department officials. It is time a real effort to secure such regulation was made.

Pharmaceuticals and Proprietaries

The rate at which the larger drug manufacturers of complete lines are reducing their numbers of items offered is to say the least astounding. The search for specialties becomes more and more intense as the competitive items are dropped. Houses which recently had from eight hundred to one thousand items to offer are now down to one hundred and fifty or two hundred. Further eliminating of other items are still taking place in these same companies.

If drug manufacturers are to seek national distribution on their products they must drop many of them from their lists. In the days when manufacturers of pharmaceuticals were sectional in character, the carrying of a complete line of drug products was a highly desirable and highly profitable plan. But local endeavors evidently do not give a manufacturer sufficient territory in which to keep his sales total mounting steadily year after year, and evidently a mounting sales total is the thing to obtain now-a-days.

The swing from the long line to the short one is not new; it is just being repeated. It will be remembered that a manufacturer selling a few items was not long ago faced with high distribution costs that made more products desirable. Now the situation is different: distribution problems are being rapidly solved and it appears as though the cost of distribution is in a good way to become sharply lower.

Specialties have been comparatively few among pharmaceuticals. Yet it seems that trade marked names and original formulas will soon be the rule rather than the exception in this phase of drug marketing. We are not swinging back to an era of proprietary remedies, but it is interesting how closely these two types of products are becoming in their marketing aspects.

A Merger Needed

The fact that the American Drug Manufacturers' Association this year has held its annual meeting at a resort away from New York is particularly pleasing to its members as evidenced by an overwhelming majority in favor of the continuance of this procedure. It is unfortunate, however, for those who are also members of the American Pharmaceutical Manufacturers' Association that the two meetings—both held at distant resorts—follow within a month of one another.

Before the American Drug Manufacturers' Association voted two new mem bers into th association at its May meeting, exactly half of the members of the A. D. M. A. were also members of the A. P. M. A. So it can be appreciated to just what extent these two meetings inconvenience the members of the two associations.

It has been suggested—and it may quite readily become the custom—to hold the two meetings on the same days at the same place. In this manner of holding the meetings those who are members of both associations would be required to make only one trip, and to absent themselves from the office for only one four-day period in order to attend both meetings. They would, therefore, meet all the people that they meet at both the meetings and would also glean the combined thoughts of the two groups.

But the eventual goal of these two groups should be consolidation. There is no legitimate reason why there should be two associations of the type of manufacturers represented in these two groups. As the drug manufacturing industry is lined up to-day these two groups have most everything in common, and few individual problems. There would be much economy of time and effort on the part of the members of both associations if they were welded into one group.

To have the manufacturing drug trade divided into various groups is not to our mind to the best interests of the industry. Under such conditions there are always wrong opinions formed by outside interests of just who represents the voice of the drug industry and just what that voice is saying. Two strong associations with the full weight of the industry behind them is far better than many associations among which this weight is divided.

Price Maintenance Losses

Although many manufacturers are emphatically in favor of price maintenance legislation, it is a fact that ever so many of them do not really know whether they would obtain more business, or make larger profits under price maintenance than they would selling recklessly. It is not to be denied that when a manufacturer's product becomes a football of the trade and is cut too severely, there is a distinct reaction against the product that is eventually felt by the manufacturer.

But consider this case. A manufacturer with a fifty cent product decides to maintain the price. He sells to the retailer at $4.00 per dozen. His competitors have a fifty cent price which is quite generally cut in competitive territories to thirty-five cents and lower.

For a time the manufacturer continues to quote a retail price of fifty cents and to maintain it. But in the competitive centers he cannot sell against his competitors who allow cutting.

What does he do ? He reduces his retail selling price to forty cents and his trade price to $3.20 per dozen. Then he allows his product to be shaded slightly, and, behold, he is in a class with his competitors. Of course in the more sparsely settled areas where the list price is always obtained, he has a legitimate price advantage over his competition.

But his competitors sit back and smile. They say that although this other firm sells more of the product than they do, those who are allowing the price to be cut are making more money. The reason is simple—the price maintenance manufacturer is obtaining only $3.20 per dozen for his product while the others are getting $4.00 per dozen.

Price maintenance will cost a manufacturer money whether he realizes it or not. Whether increased sales that will replace this cost can be realized through the application of price maintenance or not only experience will tell. To say the least, from a profit and loss viewpoint the questionable is highly debatable and those who are shouting the loudest for it do not realize that there is another side to the question.

The Colored Glass Problem

It is indeed surprising that the drug manufacturing industry has never arrived at any satisfactory conclusions regarding the value of glasses of various colors as protective agents for their products. For many years the fact has been known that their is merit in colored glass for shutting out destructive light, but thus far very little is known. Hence the fact that some colored glasses are sold to manufacturers merely because they look better than the clear glass.

The intense research that has taken place on closures of various sorts; on packing some products in a vacuum and others in carbon dioxide; on stabilizing products not only by control of pH but by the introduction of chemical stabilizers, makes us stop and wonder just what is so complicated about the determination of the control of the actinic rays of glass.

It would appear on the surface that the problem was comparatively simple when one considers the involved scientific research carried on by drug manufacturers. The tools to carry on the necessary investigations are most certainly available. The need of answering the problem must be apparent to any manufacturer with even a small line. Yet, although committees of the various associations were appointed over a year ago, there is nothing new to report.

Perhaps the problem does not affect any one manufacturer seriously enough for anyone to get steamed up about it. But it does affect the entire industry sufficiently to have the various associations back the necessary research. Merely because all manufacturers are in the dark on the problem and therefore, no manufacturer has a competitive advantage over the other in this regard is certainly no excuse. Yet if one manufacturer found the secret of protecting his product by means of various shades of glass, it would not be long before the other manufacturers felt that the problem was extremely important and pressing.

Sauce for The Goose

Creating consumer demand through the combination offer is generally thought to be a bright idea. Twin offers of one product with a companion product serves the use of obtaining more complete distribution throughout the retail trade as well as among the consumers. Recently we were told of a manufacturer—a leader in his field—who had been in business for many years. On a new product, by means of a combination offer he obtained in six months more complete distribution throughout the retail trade than he ever obtained on his old product.

But all is not gold. In at least one case the combination offer made by a manufacturer of tooth paste has come back to haunt this manufacturer. While this manufacturer offered his tooth paste with a tooth brush at a ten cent advance over the price of the tooth paste alone, it is now possible to buy at least one tooth paste with a tooth brush at less than the selling price of the first manufacturer's tooth paste alone. Furthermore, a leading manufacturer of a twenty-five cent tooth paste is now planning to give a tooth brush free with two packages of the paste at the regular price. For this offer he has ordered twenty-five million brushes.

Manufacturers who give away part of the legitimate profit on their products are destructive to the industry in which they are engaged. This is their right under the law as it now exists. They are also allowed to disturb other industries by giving away more than the complete profit on the products that they choose to include in their combination offers.

While most manufacturers are not prone to condone those chain store operators who bait the public with advertised specialties sold below cost, they themselves are pursuing the same tactics in their combination offers. *There is no sound economic reason why the* public should be given something for nothing by a manufacturer anymore than by a retailer. The buyer knows that he foots the entire bill in the end, and he is likely to have no greater confidence in the manufacturer who baits him than he is in the retailer who does the same thing in another way. The procedure is not for the best interests of the drug manufacturing trade—it is decidedly destructive.

Increasing the Menthol Tariff

American consumers of natural menthol have no love for the Japanese traders who are constantly manipulating the market for this necessary drug raw material. But neither has any large number of them any desire to see the duty on menthol increased from 50 cents per pound to 75 cents per pound, unless the increased duty will accomplish something more than give more revenue to the Government.

Menthol consumption is steadily increasing as its use is being extended to various widely used toilet preparations as well as to some makes of cigarettes. Fortunately enough there are several different synthetic menthols that are keeping the price of the Japanese natural product within normal bounds. But all of these synthetic products are not made in this country, and the duty is to be increased on them also.

As a farm relief measure the increase in duty will fail of its purpose which is ostensibly to aid the peppermint growers of this country. A paper and pencil, as well as a knowledge of the wide range of menthol prices over any year, will quickly prove that it would be folly to accept the additional 25 cents per pound duty as a guarantee that product of menthol from American peppermint oil could be made a paying proposition. The low percentage of menthol in American peppermint oil as compared with the high percentage in Japanese peppermint oil immediately tells the major part of the story.

There may possibly be the idea behind the movement of improving conditions in this country for manufacturers of synthetic menthol. Such a move is laudable if it will increase the size and scope of our aromatic chemical manufacturing industry and if it will aid that industry eventually to relieve us of the dominition of the Japan speculators.

Although users of U. S. P. menthol must always use the natural product unless the synthetic is admitted to the Pharmacopoeia, *these users must realize that the synthetic* will greatly relieve the upward price pressure on the Japanese through its permitted use in external preparations, toilet preparations and other products that are not required to use a U. S. P. product.

It's merely a question of just what the increased menthol tariff is designed to accomplish. *If it is a farm relief proposal it will* accomplish nothing; however, if it is an industrial proposal it might possibly be of aid in keeping prices on an even keel throughout the years.

{ *Ten Years Ago* }

(From our pages, June, 1919)

Exports of quicksilver during the month of March amounted to 84,321 pounds, valued at $111,135, according to a report of the Department of Commerce. Nearly half of the total amount exported went to Japan, Hongkong being our second largest customer.

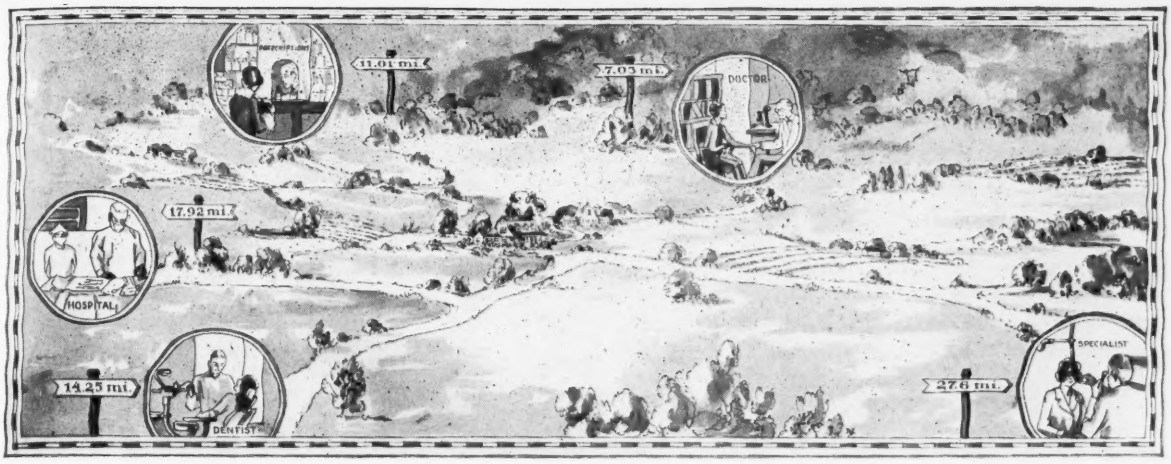
Schieffelin & Co. obtained a verdict for $3,111.78 against the Morris Drug Co., in the Supreme Court last week on notes for various sums for drugs and chemicals. The notes were endorsed by William T. Morris, president of the company, who also guaranteed in writing to pay old accounts due Schieffelin & Co. by the Morris Drug Co.

The Federal Trade Commission has issued an order requiring the Eli Lilly & Co., drug and pharmaceutical manufacturers of Indianapolis, to relinquish all attempts to influence wholesale druggists to maintain standard resale prices fixed by the company on Lilly products. The company has agreed to the issuance of the order.

From ten to sixty times as much opium is consumed per capita in the United States annually than in any other country from which reliable records can be obtained, according to the report just made to the Secretary of the Treasury by the special committee appointed by former Secretary McAdoo in March to study the traffic in narcotic drugs.

The War Trade Board announces that applications for licenses to export pharmaceutical products and medical accessories to Germany will now be considered, provided the particular commodities to be shipped cannot be procured in Germany. In submitting applications to the War Trade Board, Washington, D. C. covering these shipments, exporters should present such evidence as they may have that the pharmaceutical products or medical accessories which it is desired to export are not procurable in Germany.

The improvement in the volume of trade done in our drug and chemical markets continues, and the general tendency of prices is again upward. There is, however, still a reactionary tone about certain American fine chemicals which of late have been arriving here in excess of the demand. This has had the effect of reducing values for items such as phenacetin, acid salicylic, aspirin, salol, and other salicylates, bromides, glycerophosphates, acetanilid, benzoates, chloralhydrate, etc., until our manufacturers find no margin left. This reaction would appear to be nearing its end, and a rapid recovery is already to be noted in phenacetin which, for the moment, appears to be getting somewhat scarce.



Can the Farmer Get Medical Service?

By Carroll P. Streeter
Health Editor, "The Farmer's Wife"

A LIVELY national discussion has sprung up over "the rural medical situation" and particularly about the vanishing country doctor. We have been told by some that a general breakdown in the farmer's medical service is just ahead, and by others that faster transportation, more telephones and more rural hospitals are bringing him better service than ever before.

Strangely enough, nearly everybody has been heard on the subject but the farmer, who, after all is the person most concerned. To get, first-hand, an up-to-date picture of the situation as he and his wife see it "The Farmer's Wife," the national magazine for farm women, prepared a questionnaire with the help of the National Committee on the Cost of Medical Care and printed it in the magazine.

Replies came from 860 rural women representing every State in the Union and every type of farming country, prairie, mountain, new, old, primitive and well developed. We believe that they have given an accurate view of the situation.

Of interest to manufacturers of pharmaceutical products and proprietaries is the extent to which the farm homes of the country can call in the doctor in cases of illness. An investigation reveals that medical aid is far more expensive to the farmer than it is to the city dweller.

The survey which dealt with the availability of medical service, its quality, and its cost, yielded the following facts:

1. The "average" farm family of the 860 is seven miles from the nearest doctor, but the distance varies from less than one mile to seventy-five and for a fifth of the families is ten miles or more.

More significant is the *time* required to get a doctor, for this depends not only upon distance but on the condition of the roads, telephone service or lack of it and the possibility of getting a doctor at all. In the Summer the average time required by the 860 families to get the nearest physician is thirty minutes and in the Winter nearly an hour. For an eighth of these families, how-

ever, the time in Winter is two hours or more; several said that "in bad weather we can't get a doctor at all" and others wrote that it frequently takes several hours.

Conditions vary by states, as evidenced in Ohio and Montana, where this average traveling time in Winter is twenty minutes and two hours and a half, respectively, but they vary just as much by neighborhoods and even by farms. A family living along a paved highway may be an hour nearer the doctor in bad weather than a neighbor living three or four miles back on a township dirt road. And three-fourths of all farmers in the United States still live along dirt roads, a third of which are not even graded. This is interesting in view of the common statement that "more automobiles and better roads have compensated for the decreasing number of country doctors." For some families they have, for some they haven't.

Note the condition of the road in front of this farm home

Furthermore, with fewer physicians left to cover more territory it is sometimes hard to find and get them at all. A Nebraska woman wrote us:

"Our family doctor lives in a town of 1,000 people, fifteen miles away, and is so busy that nobody calls him except in cases of extreme necessity. Consequently we try to doctor at home. When my brother-in-law was sick we supposed it was intestinal flu and tried to take care of him ourselves but he got worse and we finally took him to the nearest hospital, forty-three miles away. They found he had a ruptured appendix. Next day he died, leaving a wife and five children."

A Colorado mother writes that she has had all six of her babies without the help of a doctor: "I tried to get him the first two times but he didn't come in time so I resigned myself to having the last four alone." Cases like these could be multiplied several times if there were space here to relate them.

The survey showed that the average distance to an eye, ear, nose and throat specialist is nearly twenty-eight miles, although in some western states it is as much as 200 miles.

For the 860 families the average distance fron the nearest drug store is eleven miles, varying from one-tenth mile to fifty-seven miles. Approximately one-twentieth of the families are twenty miles or more away but on the other hand two-fifths are five miles or less.

These people must travel an average of eighteen miles to the nearest hospital and the time required is forty-nine minutes in the summer and an hour and thirty-seven minutes in the winter. One-eighth of the families can not reach a hospital in the winter in less than three hours while some are more than a day's travel away, over mountain trails. According to the American Medical Association, forty-four per cent. of the counties in the United States have no hospital facilities at all.

The families included in the survey are fourteen miles from a dentist, although some whole counties have none. Virginia has seventeen such counties.

Only sixty-four per cent. of the women answering the questionnaire said that their children are given annual health inspections in school (whereas practically every city child has such service). Three-fourths of the replies told us that the teachers teach personal hygiene more or less thoroughly.

2. A second important consideration is the quality of rural medical service. To get farm women's view on this point "The Farmer's Wife" asked them if they thought their family doctors were up-to-date. All but seventy-four said "Yes" or "Reasonably so."

However, only 465 of the women always patronize the nearest doctor, 271 do for emergencies and minor ailments and 106 never do. Eighteen did not answer the question on this point.

The most outstanding comment made by our correspondents with regard to quality of their medical service was that an increasing number of city doctors do not make country calls, especially at night, over bad roads or if there is some doubt about prompt payment. Furthermore, a distant physician who may know the science of medicine may lack the intimate family contact which helps in treatment of the patient. Many apparently feel that the city physician has not entirely taken the place of the old fashion country doctor.

Another farm home on a typical dirt road

3. The third medical

problem confronting the farmer—cost—is nearly universal. This is not his problem alone, of course, as evidenced by the many complaints coming from middle class folk of the towns and cities. Nevertheless there are some reasons why the cost is particularly burdensome for farmers.

One is the fact that his income is not as steady and sure as the salaried man's, due to uncertainty of the weather, liability of crops and insect pests and fluctuating markets. Another reason is that the farmer must pay the doctor a dollar a mile, levied one way, for a home call. The cost of a home call for the 860 families represented in the survey averaged $7.63, and varied all the way from $1 to $75. For one eighth of these families the cost is $15 or more. City families pay no such charge although they may call the doctor several miles.

This is one of the chief reasons why farmers are worrying over the decreasing number of country doctors, for even though they may be able to get physicians from ten miles away as soon as they once could get them from five miles the cost is now $10 instead of $5. Furthermore, an increasing number of physicians are demanding prompt payment if they are to come at all, as a Kentucky woman testified when she said: "The situation is serious for many of our renters here because doctors won't come unless the landlords guarantee the bills."

And what is the cost of medical service? For the 860 families it was $104.94 last year, divided as follows:

Family doctor	$29.35
Other doctors	19.23
Dentist	15.06
Hospital	15.16
Paid nursing	5.25
Medicines not included in the doctor's fees	7.21
Extra help on account of sickness	6.86
Other expense due to sickness (lost time, earning capacity, etc.)	6.82
	$104.94

These figures are approximations since the women who supplied them had to rely on their memories rather than on actual expense records. Also, some of our correspondents gave no replies for certain items, which meant one of two things, that they had spent nothing or were unable to remember the amounts and preferred not to make an estimate. However, since they had estimated other items we assumed that they had spent nothing for the missing ones. No doubt in some instances that conclusion was wrong, but any mistakes made in that connection have made the figures too conservative rather than otherwise.

Following is another table which shows the number of families reporting on each item and the average amounts spent by *those families only*. For example 610 families estimated what they had spent for medicines not included in the doctor's fees. For these 610 (and not for the whole 860) the average amount was $10.17. Opposite each amount is the number of families concerned:

Item	*Amount*	*No. of Families*
Family doctor	$39.14	645
Other doctors	52.35	316
Dentist	22.92	565
Hospital	70.46	185
Paid nursing	45.57	99
Medicines not included in the doctor's fee	10.17	610
Extra help on account of sickness	33.53	176
Other expense due to sickness	48.09	122

It would embarass many a family to pay these amounts, but when a bill several times larger falls unexpectedly some year, the good ship is apt to go under. That the cost of medical care does skyrocket at times is shown by the fact that one of the families represented in the survey spent $3,025 last year, eight spent more than $1,000 and 106 spent more than $200.

In all of this discussion we have made no attempt to discuss the situation from the standpoint of the doctor, hospital, dentist or nurse. We have not said, for example, that we should expect more doctors to stay in the country, nor that their charges are not justified from their point of view. Rather, the article has discussed the situation from the farmer's standpoint, showing what the situation is (whether it is "fair" or not) and what some of its effects are.

From the information supplied by the 860 farm women "The Farmer's Wife" believes that it is fair to conclude:

1. That a considerable proportion of farm families are too far in traveling *time* from doctors.

2. That some city physicians are not as willing as was the old fashion country doctor to make home calls in the country under unfavorable conditions.

3. That it takes too many farm families too long to get to a hospital, because of distance and road conditions.

4. That the cost of sickness prevents a great many farm families from having all or part of the medical care they need, with a resulting toll in life, health and happiness. They must depend on home doctoring and first aid more than city folk do. Furthermore some families who do try to buy and pay for adequate medical care are left financially crippled.

Here is a real "farm problem."

The Lehn and Fink gold medal for excellent work in pharmacy for 1929 was awarded by the University of Minnesota, at Minneapolis, and by the University of Michigan, at Ann Arbor to Miss Laurine Jack, Minneapolis, and Donald S. Breisch, of Palmyra, N. Y.

The medal won by Miss Jack and Mr. Breisch are two of a number of similar annual awards founded by Lehn and Fink, Inc.

Norwegian Government to Insure Cod Liver Oil Purity

Regulations for the control of cod liver oil have been formulated by the Norwegian Government in order to insure buyers of other countries that Norwegian cod liver oil will be of a recognized standard of purity. The application of these regulations will be made as soon as the administrative features can be formulated.

The regulations follow:

Pursuant to a provisional act of June 22, 1928 relating to the State control of the quality of medicinal cod liver oil, regulations for such control have now been issued by Order in Council of January 10 last. These regulations, which apply to cod liver oil manufactured or refined in Norway, and which are to take effect on a date to be determined by the Ministry of Trade, are to the following effect:

All persons preparing oil from fish liver for medicinal purposes shall be subject to the regulations laid down by the Ministry of Trade in respect of treatment of the liver and the apparatus used in the production of the oil, the fitting up of premises and machinery, and the marketing of the oil. Notification must be made to the Director of Fisheries before the commencement of such manufacturing operations. Within the meaning of this Act medicinal cod liver oil is cod liver oil intended to be used as medicine for human beings.

All premises used for the production of medicinal cod liver oil shall be subject to such inspection as the Ministry of Trade may determine.

The Ministry of Trade will appoint inspectors and draw up instructions for them.

Inspectors shall be given free access to all premises used for the purpose of manufacturing medicinal cod liver oil and shall have the right to take control samples of the manufactured oil and of the materials used in its manufacture.

The above regulations apply also to steaming plant installed in fishing vessels.

In the manufacture of cod liver oil for medicinal purposes only such fish livers may be used as are prescribed in the Norwegian pharmacopoeia.

The sale under the name of (medicinal cod liver oil) of oil prepared from other livers than those enumerated here is prohibited.

The above regulations shall be applicable also to all works refining or filtering medicinal cod liver oil.

Such works shall be subject to such further control as the Ministry of Trade may determine; it shall be binding upon the owner thereof to furnish such information relating to production and matters connected therewith as may be necessary in order to determine the genuineness of the oil or to provide statistical material. The furnishing of such information shall be binding also upon owners of steaming plant for the manufacture of medicinal cod liver oil.

For all cod liver oil exported from Norway under the name of medicinal dod liver oil or a corresponding term in a foreign language (including also the English designation *Cod Liver Oil* without any addition, which indicates that the oil is intended for animals), proof of its being oil of the nature set forth in §3 shall be given to the Customs' authorities by the production of a certificate of analysis from a control station or analyst approved by the Ministry of Trade. Such certificate to be made out in one copy only.

The Ministry of Trade will issue further instructions as to the procedure to be followed in making the aforesaid analysis and taking samples, also relating to the form, contents, and application of the certificate and the fee to be paid for it.

These provisions shall not apply to medicinal cod liver oil exported in containers of less than 10 litres.

To meet the cost of controlling medicinal cod liver oil a charge of one Krone per 100 kgs, net weight, shall be levied on all medicinal cod liver oil exported. This levy to be collected by the Customs, and the proceeds of same to be managed by the Ministry of Trade.

These provisions shall apply also to cod liver oil of foreign origin, unless it be passing through the country in transit.

The Ministry of Trade will determine to what extent and on what conditions facilities are to be given for the public control of medicinal cod liver oil in respect of its vitamin content and for obtaining a certificate therefor or having it stamped on the original packing.

It shall be binding upon all persons engaged in the said work of control—unless it refers to infringement of the regulations set forth above — to observe secrecy in respect of the working and other business conditions they may become acquainted with in the course of such work.

Any person infringing the above provisions renders himself liable to a penalty.

Confusion of Names

Llewellyn Laboratories, Inc., Philadelphia, manufacturer of pharmaceutical preparations, has requested that the Llewellyn Holding Corp. of Brooklyn, which was organized last February under the laws of Delaware to engage in the sale of drugs, chemicals and medicines, change their name so as to avoid confusion caused by the similarity of the names.

In view of the fact that there is absolutely no connection between the two organizations, it is expected that the new company will accede to this request and thus avoid any feeling among the trade that it is attempting to engage in business upon the strength of the name "Llewellyn."

C. Mahlon Kline's *Story of a* Jobber *who* Turned Manufacturer

As told to Williams Haynes

The President of the National Wholesale Druggists' Association tells of the forecast of his father in 1899 that direct selling would eventually curtail the wholesaler's activity. How the ground-work was laid to be prepared to meet the change, and how the sailing was rocky for a time makes an interesting story.

BY 1918, at the close of the World War, it was plainly evident to any thoughtful man in the drug trade that a strong economic trend in the methods of distribution was seriously jeopardizing the position of the wholesale druggist.

Five years before that, the chain store and the co-operative jobbing house, though still in their youth, showed a lusty growth that set a few of the more farsighted to speculating upon what sort of a part these precocious boys might play, if they grew up to man's estate. At that time most trade leaders forecast an early grave for these striplings who were to die, so they thought, of growing pains while cutting their wisdom teeth.

Back in 1899 for any wholesale druggist to have foreseen the development of more direct channels of distribution which would eventually curtail the scope of his sales and cut deep into his profits was indeed an extraordinary instance of business foresight. That he should not only have foreseen these coming changes, but also forestalled them by launching into new enterprises is business acumen so keen, that it savors of commercial sorcery.

When Mahlon N. Kline led his skeptical associates in the old jobbing firm of Smith, Kline & French Company into the manufacturing of Eskay's Food back in 1895 he foresaw plainly the time when the firm would not be able to pay the thirteen per cent. dividends which had been maintained so many years, and he argued soundly that the sole feasible solution was an extension of activities to embrace the making of specialties.

As his son and successor phrases it: "Far in advance of his time, my father had the vision to foresee the failing future of the jobbing drug business and the good fortune to guess the right answer to the problem. I have had sense enough to back up his judgment and follow his counsel. That's my chief claim to fame around these parts," he added modestly.

"It is truly remarkable how the memory of my father lives," he continued. "Just the other day at a public meeting my own rector had occasion to refer to him in connection with the mid-day Lenten services at the Garrick Theatre, although he had never known my father who died in 1909. If five years after I am dead my name is even mentioned outside of the family, I shall be vastly surprised, but my father's name comes up continually and in many circles under very different circumstances. Considering that he was never a remarkable conspicuous man in any of the many spheres he moved in, this seems to me a most remarkable tribute to his memory. No doubt this is due to what was an outstanding attribute of his character, his spirit of helpfulness. He seemed always to be asking first, 'What can I do to help?' He was a keen business man; but his sense of service —long before this now over-worked word had been used in a sales argument—was always sharper than his desire merely to make more money. He was like a lawyer, sincerely charmed by his study of the law, who neglects the business side of his practice only to

wake up and find that he has more clients than he can serve and that he can command record fees for his services.

"A tangible, practical working out of his ideals of helpfulness was the revolution in delivery service which 'S. K. & F.' worked out under his presidency. At the time, a druggist's order was seldom filled inside of two weeks time.' Father saw the urgent need of the trade for quick delivery, especially of prescription chemicals, and he conceived it to be a part of the jobber's duty to furnish this service. His deal of delivery the same night for every order received before noon is now, of course, almost universal practice in the trade; but he was the pioneer and it seems to me interesting to know how he came to inaugurate such a service.

"In another direction his ideals of helpfulness did not have such happy endings," continued Mr. Kline leaning back and smiling. "He had a hobby of helping down-and-outers, and he was continually interested in a rare flock of jail-birds and ne'er-do-wells. They attached themselves to his charity. He fed them; got them jobs; lent them money; tried all sorts of ways of rehabilitating them to respectability and usefulness. They stole from him, lied to him, cheated him in every way, and to the best of my knowledge not a single success ever crowned his many, many efforts. It must have been a deep disappointment to him; but to the end of his life he optimistically persevered. After his death this precious crew tried to fasten themselves onto me, and as I shook them off one by one their parting shot always was: 'You're not the man your father was!' It was most embarrassing then, when I was most manfully striving to follow his footsteps in business."

Mahlon N. Kline

That Mr. Kline should be so surprised that his father's memory should be so well kept seemed to me surprising. My own father, David Oliphant Haynes and Mahlon Kline, the older, were long and fast business friends, and one of my first missions in business was a visit to his office at Arch and Fifth Streets, Philadelphia. I remember him after nearly twenty years, vividly as a handsome, very impressive man of great dignity and very great kindliness. He made an impression not easily erased and despite marked differences, there is much of the father in the son who has followed his footsteps to a point where he has been forced to blaze a trail farther forward for himself. They have both the same finely shaped head and quiet blue-gray eyes. The son is leaner, more wiry—energy and friendliness rather than dignity and kindliness. I could not resist the temptation to ask what he thought was the future of the jobbing business whose changes his father had so clearly foreseen. He threw up his hands in mock horror.

"Must the son of a prophet be also a prophet?" he quoted. "Only a soothsayer can tell the jobber's future now. Changes come thick and fast, and I will confess to many a worrying hour of wondering whether or not I have backed the right horse in this curious steeplechase. Americans are all for high speed and low price nowadays. It's a disconcerting public to buy for and sell to. Mergers and big affairs are popular financial fads, but there's a lot of latent antipathy still to big business. For example, out in California we run a milk sugar-casein plant, handling daily 200,000 lbs. of milk, and though some big combinations have about gobbled up the creamery business, we find the farmers would rather sell the small and independent plant. Maybe that's a significant American attitude that will have its say about some of the awfully poor stuff in the form of merger securities that has lately been unloaded upon the dear public.

"In our specialty manufacturing business, however, we are well set. It was a slow growth with us. I remember in the early days that Eskay Food sales were so small and showed such little increase that our directors seriously considered cutting out all advertising. My father blocked that. The most constructive contribution that I have been able to make to this business was the discovery of the right way to advertise our ethical specialties. That was about 1912 when our Eskay's Neuro Phosphates, having been on the market a dozen years, had reached a grand yearly total sale of $8,000. Since then it has been double, double, double, almost every year.

"If discovering our advertising secret was my only clever business act, my bravest was when I approved an advertising appropriation of $90,000 at a time when we owed the banks $1,900,000.00 and they

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A group of new structures in Rio de Janeiro

What South American Industrialization *Means to the Exporter*

By W. L. Bomer

Export Manager, Bristol-Myers Company

IF THERE is one outstanding thing that stares an American exporter in the face upon a visit to the southern South-American countries after an absence of several years, it is the rapid pace at which these countries are becoming industrialized. Before my previous visit of six years ago I was in the habit of visiting our southern neighbors every few years. From one visit to another, the large cities, and in fact the entire countries in general, appeared just the same as they did on the previous visit. Certainly there were no changes that would impress themselves upon the casual observer. But now all is changed. As one passes through he sees new, beautiful suburbs of the larger cities. A subway is being built to take the commuters right into the business district of Buenos Aires. Skyscrapers, silk mills, hosiery mills, a huge municipal slaughter-house, chemical plants, and various other indications of the new era of that part of the world thrust themselves at the traveler. Although indications of the new trend are not wanting in practically all of the countries visited, when one reaches Buenos Aires he is faced with a revelation.

Upon reaching Brazil and going into Rio de Janeiro, the fact that this latter city is progressing quite as rapidly as Buenos Aires is particularly striking. Heretofore Buenos Aires has appeared to be the most busy city with Rio seemingly satisfied to enjoy the beatuies with which nature has so richly endowed her. Buenos Aires is still well in the lead, but the fact that Rio is approaching it somewhat is very clearly indicated by the commercial rivalry that exists between the two cities.

While this industrialization of our neighboring countries is very interesting to view, the changed conditions are clearly indicative of what is ahead for the American manufacturer who expects to continue

to do business in these countries. He will constantly be forced to decrease his quantity of goods exported and to manufacture in a greater number of countries than heretofore. This does not mean that all exporting of drug products and toilet preparations will necessarily cease, nor does it mean that the total

The new tall buildings in Buenos Aires testify to its progressiveness

value of the drug products and toilet goods exported will not show an increase in coming years. But it does mean that of the business done by American firms in Latin America, the percentage of American goods manufactured in those countries will steadily increase, while the percentage of goods exported to those countries will steadily decrease.

Office of Hussey & Co., Buenos Aires. Hussey & Co. are Bristol-Myers agents for the Argentine

The reason is plain. The Latin-American countries are going to pursue the methods of the United States and attempt, by means of high tariffs, to shut out imports of manufactured products. The huge bank buildings as well as the enormous skyscrapers are naturally the outgrowth of improved business conditions, but looking at it conversely these improvements need greater industrial activity to support them.

There is no reason to bewail the fact that these countries are anxious to increase their industrial activity; the only thing for American manufacturers to do is to meet the changing conditions in the most advantageous manner. The recent law passed by the Chilean Government absolutely prohibiting the importation of all proprietary medicines (with the exception of those deemed necessary for the health of the country) merely means that American firms desirous of continuing to do business in Chile will have to manufacture their products in that country. The increased Argentine tariff which levies a duty on many drug and toilet preparations in excess of the domestic prices of the products to the retailers merely means that in order to have the selling price of the product in the Argentine at a level designed to attract a greater number of consumers, the product should be manufactured in the Argentine.

There are always the smaller countries that have not yet become industrialized for the manufacturer newly in export markets to experiment with. However, after the countries still premitting free importing are exhausted, these manufacturers also must consider the establishment of branch laboratories within the boundaries of the important countries that they would sell to.

It is surprising that many manufacturers hesitate to manufacture their goods in these foreign countries when quite often it proves far more profitable to do so. In paying the very heavy duties levied on various drug and toilet preparations, the package of the product given is small and the selling price is very high. A market cannot be expected to increase materially under these conditions as we all know that only when a fairly large quantity is given at a price at which almost everyone can buy, does a market grow in a satisfactory manner.

It is true that at the present time manufacturers of some drug products and toilet preparations in Latin-American countries have sharply decreased their production costs by local manufacturing. But one will find upon investigation that in some instances this saving has not as yet been passed on to the foreign consumer. This

The new port works at Autofagaste, Chile, which will make possible the docking of large ships

is probably due to the fact that there is not sufficient competition from other foreign sellers in the market to make lower selling prices necessary. Until such time as more of the American and other foreign manufacturers selling in those countries undertake

(*Continued on page 617*)

A NEW PACKAGE *to Sell a New Formula to the Trade*

By William G. Mennen
President, the Mennen Company

The story of why and how we produced a shaving cream with a somewhat different formula from the cream that we had produced for many years and of why and how we first used practically the same package for both products but finally made a striking change in the package of the newer product, goes back a full ten years. And it is quite necessary to start at the beginning so that a proper picture of our problems as they successfully arose can be told.—*The Author.*

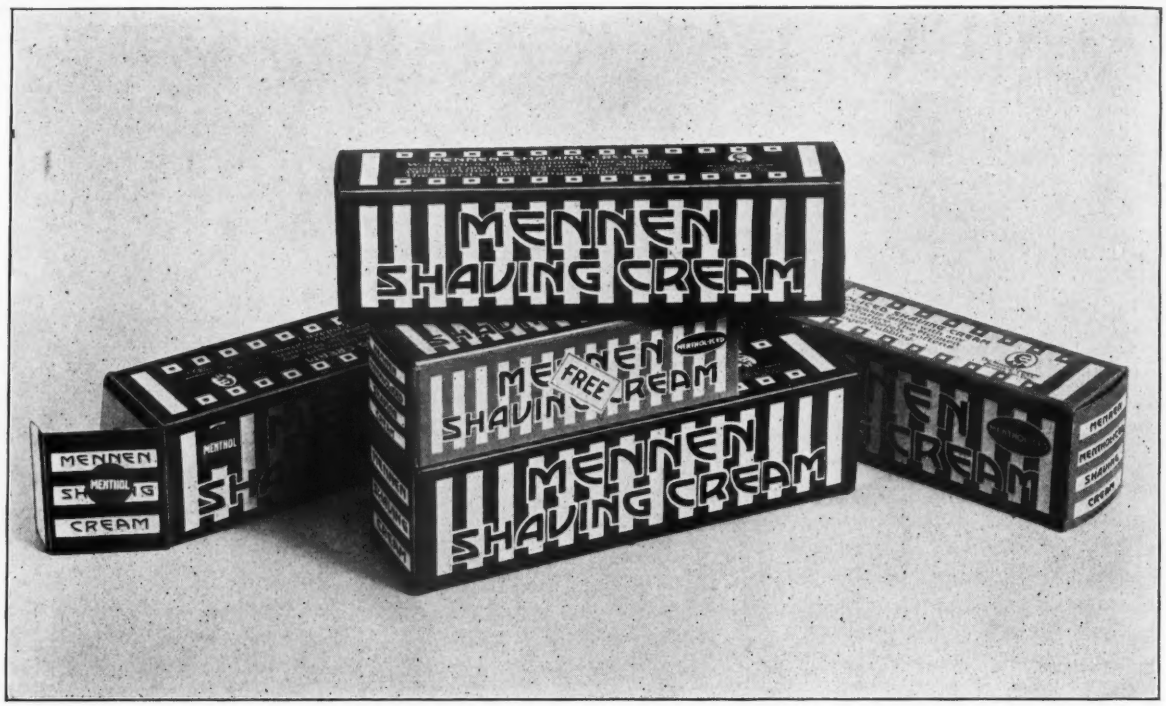
IN MERCHANDISING shaving cream, as in merchandising any product, the prime requisite is not only to have a product of merit that has a legitimate reason for being accepted by a large portion of the buying public, but also to keep that product in the same position despite what competition does or thinks. It is the policy of our company not only to keep up with our competitors, but to lead the way whenever possible.

It was about 1919 that I was shaved in a ship's barbershop when sailing South. After the barber has shaved me, he applied a peppermint lotion to my face. Immediately I experienced a cooling sensation which impressed me very favorably, and I began to do some thinking.

Upon my return I had decided that this delightful cooling sensation could effectively be included in our shaving cream through the incorporation of menthol in the cream. I got very little encouragement from those associated with me. Bear in mind that at that time there was no menthol shaving cream on the market, consequently many people in the company were skeptical as to the acceptance that could be built up for such a cream. There is one important fact that must not be overlooked when the reluctance of certain of my associates to endorse such a change is considered. The first sensations of cooling and burning are the same. Consequently, in marketing a menthol cream it must be remembered that some people would think it cooling in effect and like it, while others would think it was burning and not care for it at all.

However, I had long been of the opinion that anyone who would take witch hazel and menthol and incorporate them in a cream would produce a product that would find immediate acceptance as an after-shave lotion, particularly as it would eliminate troublesome bottles and would be found especially convenient by those who travel. This I proved to my own satisfaction when we marketed our lotion-like product known as Mennen Skin Balm. This product rid the user of the undesirable bottles necessitated by liquids, and gave the tingling effects of after-shaving lotions with the cooling effect menthol. It met with instant favor.

The ready acceptance of our Skin Balm led me to the conclusion that the original idea of incorporating menthol in a shaving cream was a real idea that would be accepted. There was, however, a condition that had to receive careful consideration before anything along this line was decided. That is the fact that not many years ago any sensation in a shaving soap that gave a "kick" to the soap when applied to the face meant that the soap contained free alkali. Consequently all manufacturers of shaving soaps were anxious to eliminate any unusual sensation from their products since the consumer might be of the impression that the product contained free alkali. For some years past, however, the better known shaving creams have been quite generally improved and a



The original Mennen's Shaving Cream carton still in use is shown at the top center. At the left is shown this same carton with the red balls containing the word "menthol" on the side and the end. At the lower center is shown the regular carton with the new orange striped carton attached to it for the introductory combination offer. At the left is shown the final carton of the "Menthol-iced" Shaving Cream.

more bland product offered to the public and we finally came to the conclusion that the public had sufficiently forgotten the alkali sensations of former days to accept a new tingling sensation without the suspicion that it might mean irritating alkali in the cream.

Therefore, we decided to market a shaving cream containing menthol. While we considered the possible effect of such a step on the sales of our Skin Balm, we were sufficiently confident that the sale of the latter product would not be seriously affected. As a matter of fact, we have since found that the sales of Skin Balm have increased as a result of the introduction of our menthol shaving cream. One increased and prolonged the cooling effect of the other. To avoid any wrong impression arising in the mind of the consumer as to whether the effects of the cream were cooling or burning, we decided to lay all the cards on the table and tell the consumer that there was menthol in the cream and to prepare him for a cooling sensation. It was this thought that gave rise to the term—that has since been granted a copyright —Menthol-iced.

In first presenting this cream to the market we felt that the green color that has always distinguished the Mennen tube and carton was too big an asset to lose, so we determined that we would merely place a distinctive mark on the package of the Menthol-iced cream to distinguish it from the plain non-menthol product. Further, in line with our cooling appeal we used the red ball so commonly associated with ice skating. We must admit that we overlooked that part of the country where there is no skating and that the red ball would not necessarily refer to ice. Also, this part of the country is where the cooling effect of menthol in the lather would be more appreciated. The application of the red ball to the carton was first made with stickers which were placed on the various panels, also a red ball was printed on the front panel of the tube. The red ball pasted on the package proved inadequate. It looked too much like a price tag. So we later printed it on the carton as well as the tube. In our advertising we merely called attention to the fact that we had two types of shaving cream, stating that the package marked with the red ball contained Menthol-iced cream. While the degree of education among consumers reading our advertising was fair, the lack of knowledge among the trade was especially noticeable. For the sole purpose of forcing distribution of the menthol cream, we purposely placed a certain percentage of packages of our menthol cream in every shipment of shaving cream, although oftimes no packages of the menthol cream had been ordered. The results of this method of distribution were satisfactory enough but we found the drug store personnel were not sufficiently impressed with the fact that they were stocking two kinds of Mennen Shaving Cream.

In many cases this was due to the fact that the owner or manager of the store to whom our representative had told the story of two varieties of cream did not pass the story along to his clerks. A similar situation existed in the wholesale distributor's organization, and the lack of knowledge in both trades resulted in an indiscriminate distribution of the two kinds of cream, consequently, in many instances the consumer received the Menthol-iced style when he went in to purchase Regular Mennen Shaving Cream.

In such cases where the buyers received and liked the Menthol Cream and later went back to the drug stores for it they were told in many instances that Mennen had only one shaving cream and that there was no such thing as Mennen Menthol-iced Shaving Cream. Certain of these buyers then brought in the used tubes with the red ball on them and demanded the same brand. Thus finally the fact was impressed upon the druggist that he had two types of Mennen Shaving Cream in stock.

Trade in Confusion

When we saw how universal this confusion was in the trade, we decided that something drastic had to be done. Obviously, the easiest way was to design a strikingly different package for the Menthol-iced cream, much as we hated to depart from the green color scheme.

Therefore, we decided upon a dramatic but rather expensive method to impress the dealer and his clerks, once and for all, with the fact that there were two distinct Mennen Shaving Creams. The method that we adopted also made certain that every consumer of our regular shaving cream would be cognizant of the fact that we had two kinds of shaving cream. It meant too, that each user would be given a chance to try the new cream. This method consisted of attaching directly to each package of the regular cream a half-sized package of the Menthol-iced cream in the new design. The half-sized package of the Menthol-iced cream was given free, but, there it was, in its own distinctive carton, fastened to the other carton so that it could not be easily separated. The distinctive feature of the new package of Menthol-iced was a change of the basic color from green to orange. The white stripes remained as did the blue lettering. The word "Menthol-iced" was placed on the side panels in a blue oval, and was included in the name appearing on the package ends.

New Package Follows Education

After quite complete distribution of this combination offer had been effected, we felt that we could now place the new Menthol-iced cream in the full size package in the orange color and thereby make sure that the trade and the public knew of the existence of the two types of cream in distinctive packages. We recognized that the druggist might object to handling two different types of shaving cream made by the same manufacturer and thus handicap the universal distribution of the new product.

The druggist is, naturally enough, averse to carrying any more shaving creams in stock than he has to, and there is no reason, in his opinion, why one manufacturer should produce two different creams and thus require him to add to the already large stock of shaving creams carried on the shelves.

Advertising Concentrated on Menthol Cream

Therefore, we decided for a period to concentrate all of our advertising efforts on the Menthol-iced cream. We had no fear of any possible effects upon the sales of our regular cream since we felt that the regular cream was firmly enough entrenched to continue to sell at a steady rate until such time as we were ready again to give it particular attention in our advertising.

As a further means of gaining dealer as well as consumer acceptance for the new Menthol-iced cream, we instituted shortly after this a special combination offer of a Gem Razor with each tube of the Menthol-iced Cream. We backed this up with very heavy advertising as well as by window displays.

Within a comparatively short space of time 50,000 window displays were installed in drug stores and other outlets where men's products of this character were sold.

In less than six months we have obtained the same complete distribution for our new shaving cream that we enjoyed on our regular cream. We know that this properly-built distribution will stay with us. We are certain that the entire retail trade now knows that Mennen has two different shaving creams in two different packages. Recent investigation by our advertising agency and by our own men indicate that Mennen Menthol-iced is firmly established and that it has in no way affected the sale of Mennen Shaving Cream without menthol. The new cream supplies the demand of those who want the triple-cool thrill that menthol adds to their morning shave. The regular Mennen cream still has its great army of men users who like its bland lather.

Two Creams to Stay

I have been asked on various occasions if we are planning to discontinue the original Shaving Cream in the green package. My answer to this is a decided "NO." Why should we discontinue the sale of any item that has an increasing number of users each year? It must be appreciated that many men do not like a shaving cream containing menthol, while others would use nothing else. While offering a shaving cream that some consider a distinct advantage over the other types of shaving cream there is no reason why we should throw overboard a large volume of business which results from an enormous consumer demand that has been built up through many years of effort—that large volume from those who prefer the original Mennen cream. No, there are two types of Mennen Shaving Cream and both are here to stay.

Bales of seaweed being delivered to the plant as raw material for agar agar.

AMERICAN MADE AGAR

Formerly imported solely from Japan, Agar Agar is now produced in our country

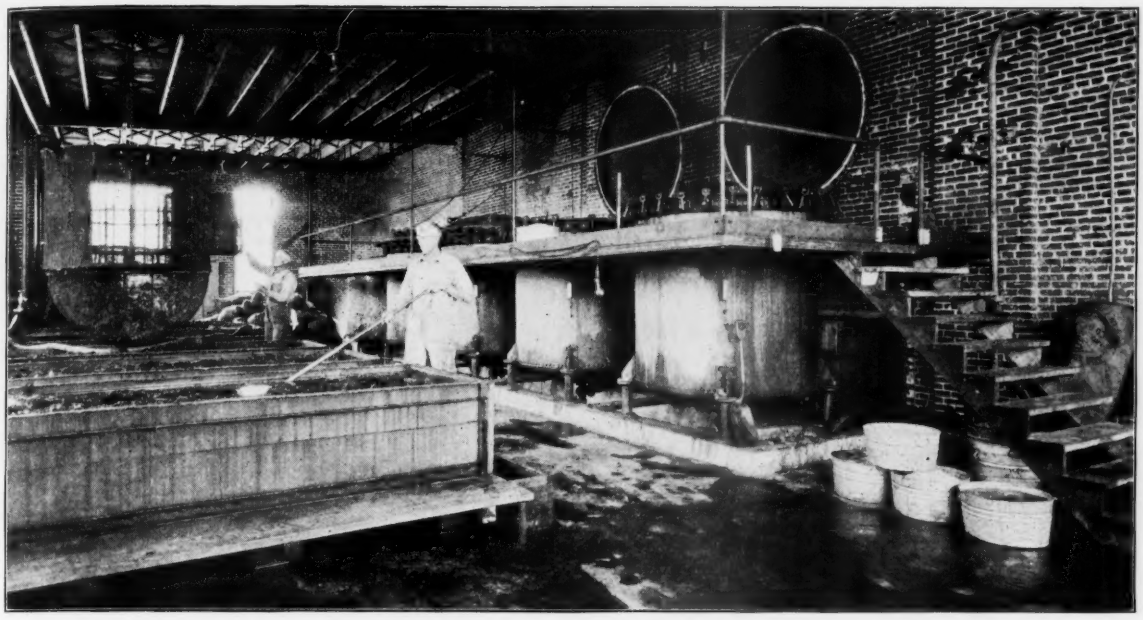
By H. D. Mackinnon*

UNTIL a short time ago, the only agar obtainable was that imported from Japan. When it was found that the sea fern used in making agar grows in abundance along our Pacific Coast, it was natural that in line with our national efforts to utilize and develop natural resources, we should here establish the agar industry. However, our high standards of manufacturing did not permit the adaption of the methods used in Japan, primitive methods that have remained practically unchanged from generation to generation—where human hands are the accepted means of manipulation. Rather, chemist, engineer, Machine—all contributed toward the development of a modern, sanitary, mechanical process of making American agar where it does not once come in contact with human hands. This entire operation is under the direct control of the plant chemist and doubly ensures the purity, uniformity in grade, and high quality of the resultant product. American Agar is not bleached, therefore it is of the true agar tint—slightly grayish in color. This in no way affects the clarity of the resultant jell which in the case of American agar is clearer and purer than any other, and this after all is the necessary factor to be considered.

The warehouse with bags of finished American agar.

It is fascinating to watch the process of modern manufacture where each operation is the result of perhaps years of painstaking efforts along the upward trend of progress. The factory to-day, with its labor and time-saving-devices, is like some huge Genii who, with a few short passes,

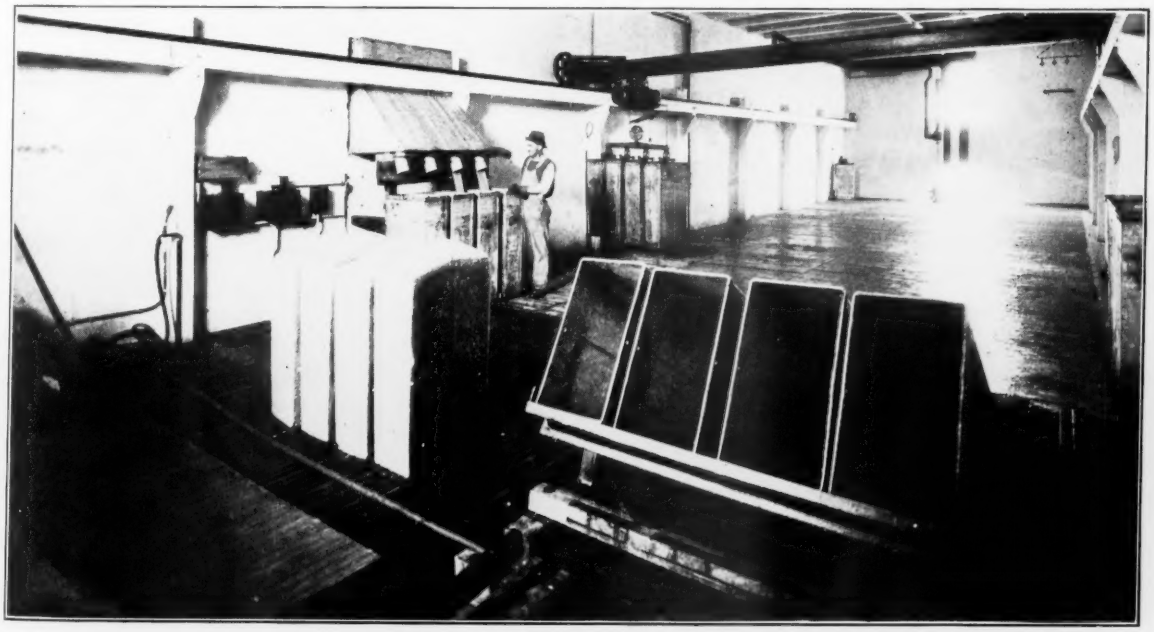
*General Manager, American Agar Co.



Washing tanks and loading basket on left; digesters on right.

transforms one object into another. Here, for instance, lie great bales of dark red sea fern. One passes into the next room and white flakes are being disgorged from a huge funnel. Overhead is a maze of pipes and tubes, a huge network throughout the factory. Switches in their trim black cases dot the walls. Overhead runways convey their cargoes with clock-like precision. Rows of levers serve to reveal yawning gaps-the sunken freezing pits. Everywhere one is impressed with the marvels of modern machine.

The sea fern is first washed for a period of twenty-four hours in tanks through which steady streams of pure water flow continuously. Then the loading baskets convey the washed fern to the huge pressure cookers and after having been thoroughly digested, the resultant liquor is pumped into the storage tanks where it is prepared for the filter press. The clarified liquor coming from the press, is passed through an ingenious network of tubes imbedded in a cooling chamber, congealed, cut and dropped down a chute into vats which magically disappear into the sunken freezing pits.



Freezing room showing freezing cans being filled and blocks of frozen agar and ice ready for the crusher.

The filtering process is the first refining where the solids are all removed. The solution again is subjected to a further purification where the soluble salts are removed.

It seems paradoxical that in a plant where lost time or motion is considered heretical, that the frozen mass must now be thawed again. But the freezing has accomplished a transformation for in the solution that now flows from the thawing device, thousands of tiny crystallized flakes float on their way to the dehydrating process.

The dehydrator after sucking the water from the flake carries it into enormous cylinders that tower stories high up through the very heart of the plant. A fan forcing a draft of hot air tosses the flake about in a miniature snow-storm until thoroughly dry, the flake drops through a funnel into the storage barrels and thence to the grinding machine which converts it into a granular substance.

The plant chemist is at all times in constant touch with the entire operation ensuring a pure, clean, uniform product.

The potentialities of American agar seem almost unlimited. Aside from its easy adaption to provide a gelatinous "filler" in countless industrial processes, the pharmaceutical trade have long recognized the indispensable qualities of pure American agar in mineral oil emulsions, used in combination with stomach and intestinal remedies as phenolphthalein, cascara, etc.; used in creams; and in its unadulterated state, as a corrective media for the treatment of constipation and stomach disorders. In line with the last, the public are gradually awakening to the fact that agar, unlike the ordinary medicine, is really best taken as a dessert in jell form, and that the regular habit of taking a glass of agar jell with each meal in the form of fruit jell or salad, is of more benefit to the system than if taken any other way. The agar jell has a rather tantalizing quality—it is entirely without taste and odor and absorbs the fruit juices and colors exceedingly well, producing a jell dainty enough to satisfy the most discriminating. Rather a radical departure from the idea of "taking medicine."

American agar, through laboratory tests, has well earned the reputation as being the best agar obtainable for bacteriological work. The druggist, the physician, the dietitian, the industry and the public have all quickly conceded that the bacteriological professor's choice is a good one.

The uses of agar agar are many: the best known use being in the treatment for chronic constipation. It is in no sense a cathartic, but a gentle laxative. While passing through the system it will absorb more than 20 times its weight in fluids.

The wide range of the uses of this product makes it a valuable commodity in the commercial world. Following are a few of the diversified classes.

Pharmaceutical Art—Adhesive Dressings, Cold-Creams, Laxative –Used in combination with stomach and intestinal remedies, as phenolphthalein, and cascara etc.

Castor oil can be incorporated with it so that the nauseating effect will be covered.

Mineral Oil Emulsion.

Culture Media in Bacteriological Work Food Uses—In cereal foods, Confectionery (Candies, etc.), Jellies, Preserves and Jams, Pastries, Salad Dressing, Thickener in Soups, used in articles of food in place of starch or animal gelatin, Water Ices and Sherbets, Cream Cheese.

Industrial Uses—Clarifying Purposes, Hectographs, Packing fish or meat when a low temperature is needed, Preserving food in canning industries, Sizing in Silk Industry.

Agricultural Cod Liver Oil Activity

The Department of Agriculture has announced that efforts of the Food, Drug and Insecticide Administration to remove adulterated and misbranded cod liver oil preparations from the channels of interstate commerce have met with much success. The full text of the statement of the Department follows:

"Makers of these preparations in the form of liquids, tablets, capsules, or wafers, claim for them the medicinal qualities of cod liver oil. They claim also that the new extract form is free of the oily, fatty or fishy taste normal to cod liver oil.

"Administration specialists report, however, that in most instances such preparations are not only free from the oily portions but from therapeutic principles as well.

"In its extensive survey of article of this kind on the American market during the past few years, the administration has found that such alleged extracts themselves and the various preparations alleged to contain such extractive principles were devoid of vitamin A and, with very few exceptions, of vitamin D. Both of these vitamins constitute the active therapeutic principles of cod liver oil.

"Many of these preparations, including the extracts themselves, have been taken off the market entirely as a result of the quite nonlegal work of the Food, Drug, and Insecticide Administration. The labels on others have been modified in such a way they no longer suggest any relationship to cod liver oil, and all exaggerated claims have been removed.

"One compound sold as a cod liver oil preparation, according to the label, would produce excellent results in the treatment for chronic rheumatism, tuberculosis, loss of appetite, anemia, rickets, convalescence, neurasthenia, and melancholia. This product, which was widely advertised and distributed, is now correctly labeled. 'A tablet to be used where a tonic is indicated.'

"While the first general survey of this type of cod liver oil products has been practically completed, there are still on the market some cod liver or cod liver oil preparations which, because of limited facilities of the administration, have not yet received attention.

"Work now under way by the administration involves those preparations containing cod liver oil itself, such as emulsions and various flavored cod liver oils. Where such emulsions or oils are found to be deteriorated, misbranded or otherwise having statements violating the food and drugs act, appropriate action will be taken. Many of the emulsions are composite preparations, containing, in addition to cod liver oil, egg, malt, iron, arsenic, and in numerous cases are mixed with expectorants and marketed as cough mixtures."

Powers-Sloan Co. has been organized at Bloomfield, Ia. by C. A. Powers and Floyd Sloan to manufacture a series of proprietary medicines.

Antiseptics in the Mouth

By John R. McClelland
The Kolynos Company

THE sodium soap of castor oil has had a most interesting history and has proved itself of great value to the bacteriologist who wishes to study the influence of surface tension upon bacterial activity, for sodium ricinoleate may be used to depress surface tension in bacterial cultures because it is relatively inocuous to bacteria—Larson, Cantwell and Hartzell[2]. It also possesses the peculiar property of destroying bacterial toxins, those poisons by means of which certain types of bacteria produce disease in the human or animal body.

In the April issue of DRUG MARKETS, Merrell[1] presents a very suggestive and instructive article on the merits of sodium ricinoleate as a detoxifying agent and suggests that detoxification may replace germicides in products intended for use in the oral cavity. The editor has invited a reply to Mr. Merrell from the proponents of antisepsis with the result that the data presented in this paper were assembled. *The Author.*

Bacterial toxins are produced by bacteria as a result of their metabolic activities. They occur as exotoxins which are secreted by the bacterial cell into the surrounding medium and endotoxins which remain within the microbic body and are only liberated by rupture of the containing cells. It is the exotoxins which are of most interest to us and to which Mr. Merrell refers in his article. Examples of exotoxins are the toxins of the diphtheria bacillus, Bacillus tetani (the lockjaw bacillus), Bacillus botulinus, the streptococcus of scarlet fever, and the bacillus of symptomatic anthrox. A few other micro-organisms have been reported as producing toxins but none have the importance of those mentioned.

Closely allied to bacterial toxins are those which occur in certain plants. Among these the best known are abrin from the jequirity bean and ricin from the castor oil bean. These poisons are extremely potent and according to Jordan[3] it has been estimated that one gram of ricin is sufficient to cause the death of 1,500,000 guinea-pigs.

Since Larson reported on the detoxifying effect of sodium ricinoleate, other investigators have broadened the field by reporting that the soaps of linseed, coconut, cotton seed, and palm oils have similar properties. None of these soaps can be used without consideration of the specificity of their action however. Kozlowski[4] has emphasized this point in reference to sodium ricinoleate the antiseptic power of which he finds dependent upon the kind of bacteria, the temperature of medication, the time of exposure and the concentration of the soap solution. In his experiments a solution of 1:1000 failed to kill Streptococcus viridans.

There seems to be no doubt but that the employment of surface tension depressants may find a use in the prevention of disease caused by toxin-producing bacteria. In fact such has been the case where the toxin is mixed with the depressant in the test tube and the resulting product has been introduced into the subject whom it is desired to immunize. The next step is to determine if a detoxifying agent can be used to treat disease and this has yet to be accepted.

The bacterial flora of the mouth does not comprise any members of the toxin forming group of bacteria. The term "bacterial flora" must perhaps be defined as meaning those micro-organisms which are always present in the mouth and not the transient invaders which remain for only a short time. The use of detoxifying agents in the mouth would, therefore, be of doubtful value as a routine procedure in oral prophylaxis and in any case toxins liberated in the saliva would be swallowed and destroyed by the gastric juice whereas toxins secreted into the tissue as in diphtheria could not come in contact with the detoxifying agent.

The search for the ideal agent to combat bacteria has produced a voluminous literature and innumerable chemicals possessing varying degrees of antiseptic power. Perhaps the nearest approach to the solution of the problem was Dakin's fluid which rendered such remarkable results in the treatment of infected war wounds but even this solution demanded frequent renewal of application which was obtained by the Carrel technique. While none of the present day

antiseptics (this term being synonymous with disinfectant—Reddish[5]) are perfect, many of them are very efficient when properly applied and when used for the destruction of such bacteria as most readily succumb to their action. It must be borne in mind that disinfectants are specific in their action, and that micro-organisms destroyed by one type may be uninjured by another. Because of the failure to recognize this fact, much confusion has arisen in the minds of lay users of antiseptics until the government bacteriologists have insisted on testing disinfectants against the bacteria for whose destruction they are to be used.

In order that this paper may not exceed reasonable length, the discussion must be confined to a consideration of the use of antiseptics in the mouth. Dr. Ross[6] covered the field thoroughly last year in DRUG MARKETS and presented a very complete dissertation on the subject. It is hoped that if the reader is seriously interested in the question he will refer to Ross's article in which the concluding paragraph excellently recapitulates the essentials for study of oral antiseptics.

Disinfection of the oral cavity has been sought for since Miller demonstrated the correlation that exists between mouth bacteria and tooth decay. Miller himself carried out an extensive study of the subject which was further developed by Jenkins[7]. That these investigators were on the right track is proved by the recent work of Professor Bunting who reports that "The prevention of dental caries should also include all the factors of oral cleanliness and the reduction of overgrowths of oral bacteria by approved prophylactic measures." In other words, oral hygiene requires mechanical and bacteriological cleanliness.

In considering the benefit to be derived from the use of an antiseptic in the mouth, the favorite and most stressed objection seems to be "it may be antiseptic in the test tube but conditions in the test tube are not those in the mouth." This remark recalls the question brought up by some wit upon hearing the oft-quoted early bird proverb as to the worm's feeling in regard to early rising. If a preparation is antiseptic in the test tube where the bacteria used for the test are accustomed to artificial living conditions and are more hardy than freshly isolated cultures, the antiseptic may be much more powerful in the mouth where the bacteria are more delicate than those in laboratory cultures.

In addition Bunting has recommended the use of antiseptics for the elimination of Bacillus acidophilus from the mouth and Kolmer[8] of U. of P. writes "I have experimented with medicated tooth pastes for more than six years and believe they serve a useful purpose in the treatment of all cases, especially those of insipient infection and as a 'follow up' after a cure has been effected."

Perhaps because the term "disinfectant" is so commonly used by the laity in reference to mercury or iodine compounds, the use of antiseptics in the mouth is questioned on the ground of possible injury to oral tissues. It must be recognized that there are many chemicals of natural as well as of synthetic origin which possess antiseptic powers. The essential oils are antispetic in proportion to their content of certain germicidal constituents. Peppermint oil contains menthol and eucalyptus oil, cineol or eucalyptol. These oils are antiseptic but are generally considered wholly as flavoring agents. Thymol is another bactericide which is very useful in the mouth but which because of its relative insolubility finds no place in the armamentarium of the disinfectant manufacturer. The very fact that the essential oils and thymol are insoluble would appear to emphasize their value in oral antisepsis for Leo[9] found that while water-soluble drugs lost their antiseptic powers in the mouth in a few minutes insoluble preparations might remain active overnight.

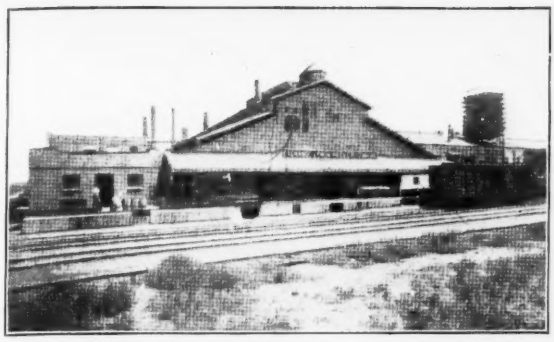
Many writers on the subject of the use of antiseptics in the oral cavity confuse sterilization with bacterial reduction. It is impossible under practical conditions to destroy all the bacteria in the mouth. Then what is the use of antiseptics in the mouth if surviving micro-organisms remain and will in time re-establish the number present to equal that existent before the antiseptic was applied ?

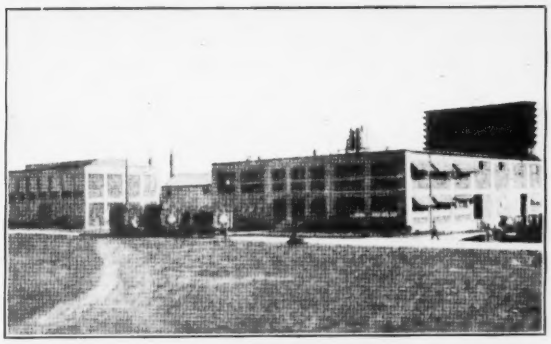
The answer lies in the results obtained by Carrel's use of Dakin's solution and in the results obtained wherever disinfectants are applied to infected wounds. The object is to reduce the number of bacteria so that the body tissues may suffer less because of a lessened

(*Continued on page 617*)

ANOTHER SHAM BATTLE---Leonard

Mr. Merrell's article suggesting that Detoxifying Agents will replace germicides in oral applications has stirred quite some excitement among authorities on the subject. Another article under the title, "Detoxification vs. Antisepsis--Another Sham Battle", attacking Mr. Merrell's stand has come to us from Veader Leonard M. D., Johns Hopkins University who with Feirer developed hexylresorcinol. Dr. Leonard's answer to Mr. Merrell will appear in the July issue.





At the left is the lemon oil plant of the California Fruit Growers' Exchange. The orange oil plant of the same company is at the right.

The Break in Citrus Oils

THE steady advance in the prices of lemon and orange oils—that gave much promise of continuing into the heavy consuming season—has been definitely halted. Further than that the markets for these two oils have had a substantial setback in price for all grades of the oils.

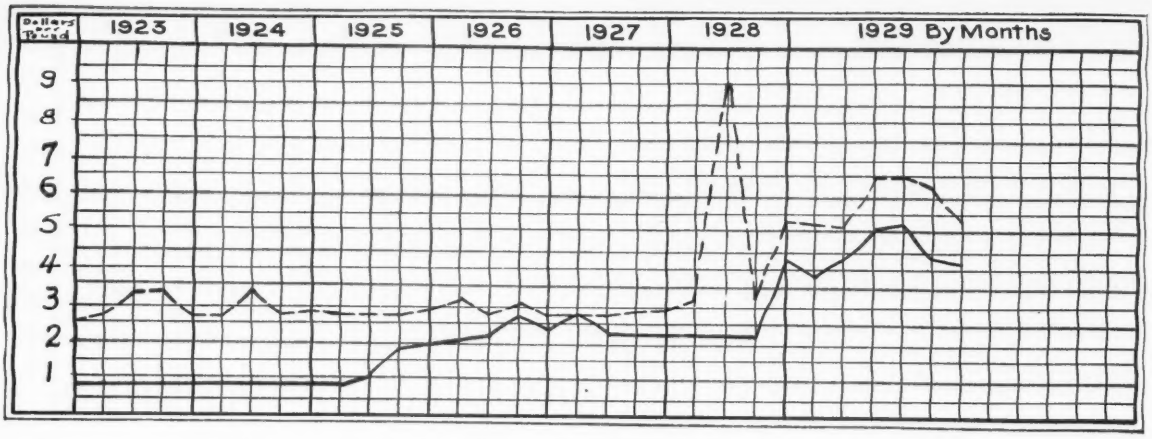
After abnormally high prices had been quoted on spot and abroad for orange and lemon oils throughout the season of poor demand, the market has broken abruptly just when the heavy consuming season arrives. An extremely heavy domestic crop of these two oils furnishes the explanation. But can the American producers be depended upon for adequate supplies in the future?

At a time when all the foreign markets (the Italian for lemon and orange, and the West Indian and Spanish for orange) were in a strong position due to the fact that the gathering of the fruit crops was long ago completed, and also due to the fact that the influenza epidemic in Europe had heightened the demand for citrus fruits, the present weakness comes as a distinct surprise to practically everyone concerned. The abnormally high prices of both oils during the period when they should have been low, and the steady gains in the prices of both oils, led those well informed as to market conditions, to the conclusion that the warm weather would push prices to dizzy heights rivalling only the ten and eleven dollar prices for orange oil a year ago.

However, a factor practically neglected in the calculations of those well informed has brought a change. The American oil produced in California has for the first time become a controlling factor in both the lemon and orange oil markets. Exceptionally large crops of both lemons and oranges have not only halted the steady upward march of oil prices, but have caused a recession and a very uneasy feeling on the part of those who are long on stocks.

The reason why the Californian oils have never been seriously considered in market calculations is two-fold. In the first place it is very difficult to speculate in either orange or lemon oil and at the same time know anything very definite about the Californian crops. This is because the Italian, West Indian and Spanish crops of the oils start to come through in November and are completely finished in early February. No indications of what the Californian situation is are available before late February and most often not until March. So there is a lapse of time between the two crops when buyers have complete information regarding the foreign situation, but have absolutely no information regarding the domestic situation. In the past the heavy buying was generally done upon the information regarding the foreign crops alone, the American production of oil being too small to be considered.

The other reason why the Californian oil was never seriously considered is that it has never before materially affected the market. It has been felt, but very slightly. There has never been any year when it has caused an abrupt halt or break in the market. Also just last year when the foreign markets were very high and firm, the firmness was due to the fact that the American crops of the fruits were very small



Solid line: Italian lemon oil prices. Broken line: Italian orange oil prices.

and Italian fruit was being imported very heavily into this country. Great quantities of poor American fruits that would normally find their way into oil and juice pressers were sold as fruit. Consequently the amount of American oils available last year was smaller than ever. But this year all is changed.

Properly to present the picture of the Californian situation this year, it is well to state that there are three separate and distinct producers of domestic orange and lemon oils in this country. One of these is primarily a producer of fruit juices. This producer buys sufficient fruit to enable him to produce enough juices to fill his demand. The oils are pressed from the rinds remaining after the juices have been extracted. It can be seen, therefore, that in this case the essential oils are merely a by-product and production is dependent upon the demand for the fruit juices.

Another manufacturer who has long been in the market maintains plants for the production of the essential oils but has no direct interest in the growing of the fruits. Therefore, he must go in the market and buy the fruit that he needs to fill his orders. If the price of fruit is high, this manufacturer is somewhat handicapped in attempting to sell his oils in competition with the foreign goods. However, this year fruit is plentiful and he is able to secure all he wants at reasonable prices. Furthermore, the foreign oils have been held at abnormally high prices which gives this manufacturer a further margin.

The third, and by far the largest present and potential producer is a co-operative organization of California fruit growers. This organization is composed of seventy-five per cent. of the fruit growers of California. The production of fruit juices, citric acid and the essential oils by this organization is entirely a salvaging proposition. The parent organization maintains plants for the production of these fruit by-products. It goes to the farmer-members, collects the poor fruit that cannot be sold in the market, takes it to the by-product plant and turns it into fruit juices, citric acid and essential oils. The by-products are sold, the profits determined, and then each farmer receives his share of the profits in accordance with how much fruit he supplied.

Until recently all the oil produced by this organization was sold through two essential oil dealers. However, within the past month the decision has been made to include three more dealers as selling agents for this make of lemon and orange oils. It is also a fact that the second manufacturer mentioned above also acts as selling agent for the oils of this organization as well as selling his own. Therefore, there are at present six dealers selling this one American make of oil against three formerly selling it.

With six dealers selling the oils the American producer doubtless feels that more American oil will be used than was formerly the case. When only three dealers acted as agents for the oils, the remainder of the dealers were prone to maintain that the Italian oils were much to be preferred with the result that the selling of the American oils was a hard uphill fight. The producers of the American oil hope to remove this condition at this time when they have so much oil to sell.

It is openly admitted by this organization that the crops of fruit are exceptionally large this year and that there is a great deal of fruit that will not find its way into the fruit market and must, therefore, be salvaged for its by-products. The policy to be followed is the economic law of supply and demand—and this year the supply apparently is far in excess of demand at existing prices. Therefore, the oil will move into consumption at whatever price the buyers will pay. There is a probability that the opening of the heavy consuming season might support the market at close to present levels, which is very fortunate for the producers.

Lest the buyers be given too much comfort by the present situation—which has indeed been fortunate from their viewpoint—it is well to remember that there was very little American oil available last year, and that such a condition can easily occur another year. While the American oils have staved off very

high prices at the approach of the heavy consuming demand, there is no guarantee that the large production of American oils will be maintained during coming years. Indeed, there is reason to believe that it will not be intentionally maintained.

The reason why the production may again slump as it did last year lies in the fact that the American producers of fruits are primarily marketing their crops as fruit. If they can sell all available fruit as fruit, they have nothing left to salvage. This was the condition last year. They are entirely dependent upon nature for the size and condition of the crops, and at the present time they do not think the by-product business sufficiently important or sufficiently profitable to set aside a definite quantity of fruit each year for conversion into these by-products if the fruit can be more easily, or more profitably sold as fruit.

There is the possibility that this important producer of the American oil might some day attempt to overcome this situation by turning the surplus stocks of one year's production into a reserve stock to be carried as a protection to consumers against a recurrence of last year's condition. In fact it would seem that this year would present a likely time to entertain such an idea, except for the fact that prices are abnormally high. A procedure of this kind would help to stabilize the market this year to a certain extent, but would assure consumers that although they would not benefit to the extent of still lower prices this year, they would be assured of the fact that the Italian producers could not run the prices to abnormal heights during a year when American production was small. A steady American production of both of these oils would act as a balance wheel to keep the market in a more stable position.

A large part of the essential trade as well as of the consuming trade have been of the opinion that the American oils were not making much headway. But the present situation belies this contention, although it may be true that this is the first year that they will be felt in a market way. However, there is the fact that the combined production of both lemon and orange oils in this country have at times reached a production of 300,000 pounds. It is also true that in some years the production is less than 100,000 pounds—how much less we do not know.

As to the possibility of the American producers maintaining a constant product from year to year to meet the potential demand, it would seem that the co-operative producing organization must require of its member farmers that they supply a certain amount of fruit for the by-products whether or not this fruit can be sold as fruit. In this way a steady demand can be built up and there is a great possibility that after sufficient stocks had been acquired, it would not be necessary to take any sound fruit for by-product purposes. However, this problem remains for the producers to solve in the best manner that will serve their interests.

Effect of Bacteria on Citrate of Magnesia Solution

Editor, Drug Markets:

I have read with profound interest the highly instructive article on "Correct Preparation of Citrate of Magnesia" by H. A. Barnby and E. L. Voight in the May issue of your esteemed publication. While the chemistry of this so often discussed preparation is entirely correct, I am inclined to think that the authors missed a very important aspect of the problem.

Some time ago we had been requested by a physician to put up a preparation of magnesium citrate for diabetics, naturally with the ommission of the sugar. We did that and in addition to it have inserted 1/10 of 1% of sodium benzoate. That took place nearly one and one-half years ago. The control sample is just as clear to-day as it has been at the time of the original manufacturing. That led me to an investigation of the bacterial side of the controversy which in turn led to the following conclusion:

(1) The U. S. P. method is designed for a fresh (extemporaneous almost) preparation. The rinsing of a bottle with boiling water is not sufficient to render the product sterile. Assuming however, that that would be the case, contamination of the liquid with the cap or with the tablet would re-introduce bacterial contamination.

(2) I have made a bacterial check of the product and concluded that the number of bacteria increases very rapidly, that bacillus viscosus sacchari is sometimes present and that oftentimes leuconostoc mesenteroides is also present.

(3) That while carbon dioxide retards the breaking up of the product for sometime, it is insufficient to prevent continuous and gradual decomposition. That oftentimes there is a slight acetic fermentation and that oil of lemon which oxidizes very rapidly is partly responsible for it.

Solution of magnesium citrate made under absolutely sterile conditions and substituting terpenless oil of lemon for oil of lemon U. S. P. will keep for a very long time.

However, it is very questionable whether the authors of the Pharmacopoeia intended to make this preparation a stable one and it seems to me that the subject should be further investigated along the lines suggested.

Schenectady Hygienic Laboratory,
June 4, 1929. Bradley H. Kirschberg.

The Walgreen Co. is planning to use magazine advertising in an institutional advertising campaign. The purpose of the campaign is to educate both the manufacturer and the public to the present size and scope of the Walgreen organization.

This advertising will be directed by Williams & Cunnyngham, Chicago advertising agency.

Helena Rubinstein, Inc., has opened a manufacturing plant in Toronto. The company will make its first shipment to Argentina next week.

Position of Grasse Crops During Busy Season

By O. C. Zilisch

Our Grasse Representative

BOTH the months of May and June are always busy ones for the distillers in the Grasse region, and this year especially, due to the fact that the roses were between 15 to 20 days late in flowering. Furthermore, orange trees were so badly touched in certain districts that the orange flowers, if not entirely killed off, appeared later than usual. The month of June has, therefore, been an extremely active one, with both the roses and the orange flowers demanding attention. As the trade knows, the flowers taken care of at this time of the year are, in the order of their importance, the orange blossom, the rose, and the so-called mountain narcissus. And in this list should be included the leaf of the violet plant.

Orange Flowers One-Fifth Normal

The winter of 1928-29 struck this favorite of the region a terrible blow, as everyone knows. In certain districts, notably those of Golfe Juan and Vallauris, the snow and cold brought with it a veritable diaster. Many of the trees are dead, and those which remained alive will take several years of careful nursing before they may be expected to produce any flowers. In other sections, like Bar sur Loup, Tourrette sur Loup, St. Jeannet, and Gattieres, the damage done is less serious. At St. Laurent du Var, one of the important centers, the orange trees suffered comparatively little. The yield is estimated at from one-fifth to one tenth of the normal crop, no one seeming ready to give any definite figure. The normal yield is put at from 1,500,000 to 2,000,000 kilograms. According to latest advices, the price to be paid for the orange flower by the distilling perfumer was 21 francs per kilogram, or approximately 84 cents. Because of the damage done by the snow and cold, there will be practically no orange flowers for neroli, it is reported, and at this writing there is no information forthcoming as to what the price of neroli will be within the near future.

Apparently some of the large distillers are growing their own orange trees in Algeria, in this way avoiding the full effect of a disastrous winter like that which visited Grasse this year. This is done also, it was stated, because many of the makers of eau de cologne show a preference for French neroli. The trees grown in Algeria, for example, and the neroli produced there, are under the strict supervision of men acquainted with and sent from Grasse, this doing away with any chance there might be of poor quality creeping in.

Large makers of eau de cologne are said to have considerable neroli in reserve, although it is felt that even this condition does not warrant any prophesying as to price, and that for the reason that no one seems to know just exactly what the reactions will be, with the exception of a knowledge that they will be upward.

The indisputable and unavoidable fact is that there will be practically no French neroli produced from this year's crop of orange blossoms. At least, that is the statement secured from practically every perfumer visited.

Petit-grain, because of the damage done to the trees, will, of course, be seriously affected.

Naturally, it is not hard to imagine how the grower of orange trees in sections like Golfe Juan and Vallauris feels, with years of hard work entirely lost. For it must not be forgotten that it takes anywhere from ten to fifteen years of patient care before an orange tree produces flowers that bring with them a profit.

Rose Crop Favorable to Buyer

This season's yield appears to be very satisfactory. The plantings had, it is reported, been somewhat neglected during the last few years, because of what was considered too low a market price. At the time this report is being written, it is felt that if nothing abnormal turns up the yield can be figured at approximately 1,000,000 kilograms. The price was fixed at 5 francs 35 centimes (about $.2136) per kilogram, delivered at the distilling perfumers' place of business. Although considered a fair price, the grower feels that it is the absolute minimum for which he can be expected to produce a satisfactory crop from the perfumer's point of view, and, of course, his own. In fact, some of the growers in regions like Le Plan were very emphatic in stating that they should receive a minimum of seven or eight francs (about 28 or 32 cents) per kilogram, if they hoped to produce a crop which would show a profit to them. Naturally, it is the same old story—which has existed for years—of the grower accusing the perfumer, and the perfumer despairing of the grower's utter lack of vision.

Narcissus Production Lower

This flower was bout ten days late as compared with other years. Production is below that of last year, a cold wave bringing about a great deal of damage in the districts where this flower is found. The yield for 1929 is set at approximately 40,000 kilograms. The market prices dropped slightly, and prices paid delivered at the factories fluctuated between five and six francs per kilogram (about 20 and 24 cents.)

No Change in Violet Leaves

These are about the same as regards price and yield as they were last year. The violets, of course, suffered severely from the cold-- the Parma being practically non-existent and the Victoria very scarce—as the trade already knows. There was only one perfumer who had, apparently, been able to secure both some Parma and Victoria violets for the so-called absolutes, and these are now on the market at 200,000 francs per kilo for the Parma (about $8,000), and 80,000 francs per kilo for the Victoria about $3,200).

Jasmine Below Normal

Among the principal flowers grown in the Grasse region jasmine takes first place. The jasmine suffered quite severely from the cold of this winter, and in certain sections it is admitted a number of the plants were killed. Despite the newly grafted plantings of this year, it is already conceded in certain authoritative quarters that this year's yield will be less than that of last year. If one takes into consideration that the successful raising of jasmine requires thorough training, special care on the part of the grower, and is constantly at the mercy of unstable labor conditions, there seems little hope of reaching an absolutely normal production for this year. At any rate, this is the sincere opinion of some of the persons in and near Grasse who are in a position to know.

Non-Coal Tar Vanillin

McKesson & Robbins, Inc., won their fight against the classification of vanillin as a coal-tar product according to a decision made public yesterday by the United States Customs Court.

Affidavits proving that the vanillin, imported from Holland, contained no trace of any coal-tar product were introduced by the petitioners, and the court ordered duty fixed upon a foreign value basis and the goods taxed as perfume materials under Paragraph 61, at the same ad valorem rate.

A Winning Hand

THE kind of a container which looks well and serves well must always be part of the winning hand in successful merchandising.

Make your bid for public favor with collapsible tubes which attract by the beauty of their appearance and give perfect satisfaction throughout use.

Over 50 years' manufacturing experience and a new modern plant give A. H. Wirz, Inc. every opportunity to furnish you with the kind of collapsible tubes which help to make the winning hand in merchandising.

A. H. Wirz, Inc., Chester, Pa.

30 East 42nd St.
New York City

1231 E. 7th St.
Los Angeles

Railway Exchg. Bldg.
Chicago

Snowy-White
Soft and Fluffy

INDUSTRIAL CHEMICAL SALES COMPANY INC.

230 PARK AVENUE
NEW YORK, N. Y.

EXTRA LIGHT PRECIPITATED CHALK
Found In The Tubes Of Leading Tooth Pastes

Four Regulators *of* MISBRANDING *of* Drug Products

By H. C. Hallam
Washington, D. C.

The Department of Agriculture recently disclaimed all responsibility for regulating false advertising, placing the responsibility upon the Federal Trade Commission. As a matter of fact, complete regulation of this, as well as other forms of unfair competition are regulated co-operatively by the Department of Agriculture, the Federal Trade Commission, the Post Office Department, and the Department of Justice.

WHEN a case involving the alleged misbranding or alleged false advertising of drugs or other products subject to regulatory acts administered by the Department of Agriculture comes to the attention of government authorities in Washington, it is handled according to a plan worked out during the past two years. This plan includes a system of co-operation and co-ordination of work among departments of the government that is designed to eliminate duplication of work, secure efficiency in law enforcement, save time and money for the government and annoyance to business men, according to the claim of officials.

To obtain these results, it is asserted, the Food, Drug and Insecticide Administration of the Department of Agriculture, the Federal Trade Commission, the Post Office Department, and the Department of Justice are working together. In this connection, Dr. P. B. Dunbar, chief of the Food, Drug and Insecticide Administration, is liaison officer for the Department of Agriculture; Herbert W. Anderson, Chief Examiner on the staff of the Federal Trade Commission, represents that body in like capacity; Dr. L. F. Kebler and Solicitor Horace J. Donnelly co-operate for the Post-office Department, and B. P. McAllister is co-ordinator for the Department of Justice.

The Federal Trade Commission receives a number of informal complaints, or applications for formal complaints, which involve alleged misbranding of foods, drugs, insecticides, or alleged false advertising of the same. These cases arise under the federal trade commission act's provisions forbidding unfair methods of competition. The Food, Drug and Insecticide Administration likewise unearth a large number of cases involving misbranding of food, drugs, etc., and what the Administration conceives to be false advertising of such products.

Straight misbranding or false labeling of these products discovered by the Administration are taken care of by it under the food and drugs, insecticide and fungicide, caustic poison, or other acts it enforces. Some time ago officials of the Food, Drug and Insecticide Administration announced that they had no control over drug advertising, except as contained in circulars and the like accompanying a package of a medicinal product. Dr. Dunbar states that a large number of cases of general advertising of drugs and medicinal products have come to the attention of the Administration and have been referred to the Federal Trade Commission for consideration.

Unlike the Department of Agriculture, the Federal Trade Commission has jurisdiction over both misbranding and certain forms of advertising, inasmuch as either may be a form of unfair competition. The Commission has been receiving a large number of cases involving both of these practices, from outside sources, as well as alleged false advertising cases referred by the Agricultural Department.

Chief Examiner Anderson states that when the Commission receives an informal complaint from outside involving the alleged misbranding of food or

drugs or other products subject to regulation under laws administered by the Agricultural Department, commission officials consult with officials of the Department of Agriculture to see whether the latter has any complaint or case involving the same product or matter. If the Agricultural Department has such a matter the Commission passes its data on the subject over to the Food, Drug and Insecticide Admintration. The latter initiates similar consultations at times and seeks data or other assistance from the Commission.

Facts Govern Procedure

If the Department of Agriculture has nothing on a given case of drug misbranding, for example, then Mr. Anderson states that the practice is for the Commission to docket the case for investigation with a view to possibly issuing a formal complaint against the respondent, if the facts warrant. Each misbranding case is governed by its own state of facts, according to Mr. Anderson, as to how it is handled—whether referred to the Food, Drug and Insecticide Administration, or dealt with by the Federal Trade Commission. Officials always bear in mind the fact that the food and drugs act is a criminal statute, while the trade commission act is not. However, both have power over misbranding.

In some cases the Administration goes further; in other cases the Commission goes further. For example, in the matter of correcting the labels of soft drinks, the practice of the Administration has been to permit the name of a fruit to be used in the trade name of a drink made with the use of imitation flavor, providing that explanatory language is used on the label in fairly conspicuous type stating that it is an imitation flavor, or that no fruit is used. In May, 1928, however, the Commission announced that its policy would be to proceed in all cases and not permit the use of such names, even though accompanied by explanatory language. One case in accord with this announcement was that involving Nu-Grape, which is now pending in the courts on appeal.

F. T. C. Alone on Advertising

Cases involving false advertising are handled by the Federal Trade Commission alone, although there has been talk about the Agricultural Department being desirous of acquiring jurisdiction over the advertising of foods, drugs and other products covered by its laws. This is a supposed secret that is well known to drug trade representatives and others interested. The situation even went so far, not so long ago, as to be the subject of an important conference between officials of the two branches of the government. Assistant Solicitor Cronin of the Department of Agriculture is understood to have represented that department in the conference. It appears that certain members of Congress have been interested in legislation along the line indicated, although Chairman Haugen of the House Committee on Agriculture, which would handle such legislation, says that it involves questions that require very careful consideration if and when the matter ever comes up. In order to give the Food, Drug and Insecticide Administration authority over advertising of drugs, foods, etc., it would be only necessary to insert a few words into that provision of the food and drugs act defining what constitutes misbranding.

False Advertising as Unfair Competition

Alleged false advertising cases are handled by the Trade Commission in much the same manner as are cases involving other forms of alleged unfair competition. That is why it has not become generally known that during the recent campaign of the Food, Drug and Insecticide Administration against preparations claimed to be for the prevention, treatment or cure of influenza and related diseases, scores of cases involving the advertising of such preparations were taken up by the Commission at the suggestion of the Administration. In this campaign, it now develops, the Administration "got them" on the labels and the Commission "got them" on the ads, as a commission official expressed it. In these cases, it is stated, the manufacturers of so-called "flu" remedies agreed to correct their advertising, in accordance with ideas of the Trade Commission. It is said that perhaps one reason was that the end of the "flu" epidemic was almost in sight.

Procedure Conducted Quietly

All this was done quietly. There was no noise or publicity. This is in accord with the policy of the Federal Trade Commission to withhold the names of informal complainants, or applicants for formal complaints, as well as the names of respondents and facts about the cases charged against them, unless and until the Commission may decide to issue a formal complaint against the respondent. The names of applicants are not given publicity in any event.

When false advertising is complained of the Commission investigates, hears both sides informally, gives the respondent opportunity to stipulate that he will discontinue the practice complained of, and if he does not choose to do so, and the facts warrant, will issue a formal complaint. Formal hearing, filing of briefs, and oral arguments would follow. Ultimately, the Commission would render a decision either dismissing the complaint, or issuing an order requiring the respondent to cease and desist from the practice complained of. From such an order respondent can appeal to the courts for review of the case or, if respondent refuses to obey, the Commission may appeal to the courts for an order to enforce its findings.

Under the Commission's supervision false advertising cases are being handled by a special board of three headed by Martin Morrison, former member of Congress from Indiana. The executive officer of this board is Eugene L. Culber, who states that 50 cases

involving alleged false advertising of drugs and foods are "ready." He says, however, that it has not been found necessary to go to the extent of a formal complaint in any such case in connection with the new campaign of the Commission against false advertising. Generally, he says, the advertisers are willing to correct their advertising. If and when there is refusal to do this the special board recommends that the Commission issue a formal complaint against such advertiser. And the Commission proceeds as in other cases if it deems that unfair competition is involved and the public interest is at stake.

The Trade Commission not only has the co-operation of the Department of Agriculture in dealing with false advertising, but of business interests, it is claimed. Publishers and advertising agencies are said to be co-operating in cleaning up advertising, as is the Better Business Bureau. If necessary, it is stated, publishers and agencies will be made parties to proceedings that may be inaugurated by the Commission against certain advertisers, inasmuch as the first two groups are beneficiaries under advertising contracts.

Department of Justice Cooperation

In co-operation between the Federal Trade Commission and the Department of Justice, informal complaints received by either body involving restraint of trade are listed and these lists are exchanged monthly between the two departments. The cases are talked over by officials of the latter from time to time. The Commission grants the Department access to its files covering such cases and the Department reciprocates to the Commission. The above is true as to cases that would come under the trade commission act, involving unfair methods of competition, which are prohibited on the theory that they tend to restrain trade. It is stated that the idea is to avoid duplicate investigations and prosecutions.

Clayton Act Violations

There are other cases involving elements of restraint of trade, creation of monopoly, and the like, which come under the Clayton anti-trust act. In such cases the Commission and the Department proceed independently in investigations of further proceedings because they are given concurrent jurisdiction by the act itself, which imposes duties on both. These cases are chiefly large cases, it is stated, and are not very numerous.

Price maintenance or price fixing has been held to be a form of unfair competition coming under the trade commission act. The same alleged offense is said to have been in the mind of legislators at the time of enactment of the Sherman anti-trust act years ago. Some cases therefore are in common, under both laws. Under such circumstances, it is the practice that if a case looks to officials of the two departments like it requires criminal action, the Department of Justice shall proceed, inasmuch as the Federal Trade Commission has no criminal powers. If such case does not appear to be one requiring action under criminal law, the custom is for the Commission to proceed towards a cease and desist order. If the Department of Justice receives a case involving primarily unfair practices it would refer the same to the Commission for consideration under section 5 of the trade commission act.

Aid of Post Office Department

There is rather close co-operation between the Federal Trade Commission and the Post-office Department along certain lines, especially in handling blue sky cases and fraud order cases. Here too, if criminal proceedings appear to be desirable, the Commission keeps out of a case, leaving it to the postal authorities to institute proceedings looking toward issuance of a fraud order denying the use of the mails to an offender. Otherwise, the latter might obtain immunity from prosecution by testifying before the Commission. Blue sky cases have been held to fall under the unfair competition law.

Officials state that a large percentage of alleged false advertising that has come to their attention concerns alleged medicinal products. Just what this figure is they decline to estimate, but they say that the relief of ills that human flesh is heir to appears to be a subject that lends itself peculiarly to alleged false, misleading, extravagant or unfair advertising. In connection with its work with advertising, there is understood to be close co-operation between the Federal Trade Commission and the Post-office Department.

Fraud Orders Through Mail

Many fraud orders are based on illegal use of the mails in connection with the sale of worthless quack remedies. Many of these are advertised. A fraud order stops the receipt of mail by a quack concern named in the order, but there is nothing to prevent that concern changing its name, and under the new name it can use the mails again and continue its nefarious practices unless and until there is another investigation and another fraud order issued in its new guise. In the advertising campaign by the Federal Trade Commission, some advertisements of such concerns can be reached, which enables the government to block their efforts with better hope of success.

When the Post-office Department gets a case of this type they refer the advertising to the Federal Trade Commission to be dealt with. The former department is enthusiastic about the Commissions' advertising campaign. Dr. Angier is in charge of details of this work, under Solicitor Donnelly of the Post-office Department.

Dr. Angier co-operates to some extent with Dr. Kebler, formerly assistant chief of the Bureau of Chemistry, Department of Agriculture, who has

long been assigned by the latter to co-operate with the Post-office Department in handling cases involving food and drugs with which the latter department was attempting to deal, via the fraud order route.

There is co-operation between the agricultural, postal and trade commission officials in the handling of samples or specimens involved in fraud order and unfair competition cases as well as cases arising under the food and drugs act. The Food, Drug and Insecticide Administration personnel and laboratories are made available for analysis of samples submitted to it by the other two departments. Like work is done by the F. D. I. authorities for the General Supply Committee of the government, which submits specifications and receives bids of contractors desiring to furnish government departments in Washington with supplies of insecticides, disinfectants, and some chemicals and drugs, surgical supplies, etc.

It appears that the Agricultural Department officials did not know, or realize, for some time that the Federal Trade Commission had jurisdiction over certain forms of advertising. When he was advised of this jurisdiction, Dr. J. J. Durrett, chief of Drug Control, in the department, is reported to have remarked that it was the most welcome news he had heard in a long time, and that he would be glad to co-operate 100 per cent with the Commission in referring to it cases arising in connection with foods and drugs. This pledge has been kept, it is declared, pending a possible drive on the part of the Department of Agriculture to secure amendment of the food and drug act, so as to give that department jurisdiction over advertising, as indicated above.

Meanwhile drug trade interests deny that the Federal Trade Commission has unrestrained jurisdiction over all advertising. They do admit that the Commission appears to have jurisdiction over certain forms of advertising involving unfair methods of competition, provided the public interest is at stake, at least "until the courts take it away from them." The trade also is preparing to fight any attempt of the Department or Congress to have the food and drugs act amended so as to cover advertising.

J. Rogers Swindell

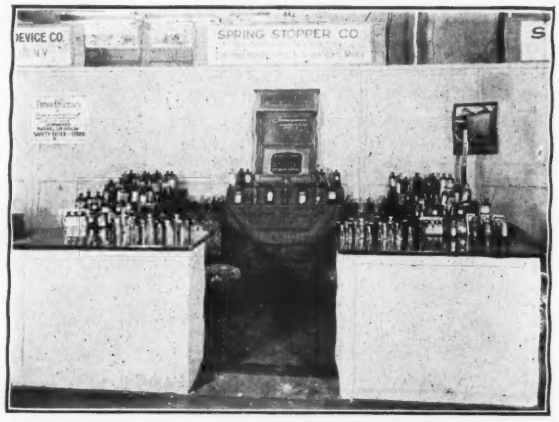
J. Rogers Swindell, associated with the firm of Swindell Brothers, Baltimore, died May 16, at the University Hospital Baltimore. He was forty years old and a son of Mrs. Ulyssia Kahler Swindell and the late J. Rogers Swindell.

For several years he traveled for the firm in Cuba, Mexico and other Latin-American countries, and at the time of his death was connected with the financial department.

Called to the service at the outbreak of the war, he went to the first officers' training camp at Fort Myer, Va. Under the rank of major, he was honorably discharged into the Reserve Officers' Corps.

Mr. Swindell is survived by his widow, four children and his mother.

Exhibitors at Chemical Exposition



Alsop Engineering Co., New York, announce publication of a new complete catalogue of portable electric mixers and glass lined mixing tanks. A copy will be furnished anyone requesting same.

Dr. L. R. Smith, veterinarian, and for the last year sales manager at the Norden Laboratories, has been appointed sales manager at the American Serum Co., succeeding C. M. Welch who resigned after two years.

How Grasse Is Maintaining Its Lead In Perfume *Flower Plants*

As P. Boischot, *Director of Garden for Experimental Research of Grasse, told*

O. C. Zilisch
Our Grasse Correspondent

FOR some time past the cultivation of perfume-flower plants in France has been centralized in that region of the Cote d'Azur which extends from Grasse to the sea. The large plantations of roses, jasmine, orange trees, etc., that give this region its particular charm, have made Grasse the perfume capital of the world. For this reason the agriculturists and the industrial perfumers are uniting and combining their efforts for the purpose of increasing the yields of the plants under cultivation and to protect them against foreign competition.

Certain countries have in fact, taken up the business of producing essential oils: Italy (jasmine, orange flowers), Bulgaria (roses), Algeria (verbena, geranium), etc. While giving all due credit to the countries endeavoring to cultivate these interesting plants, and sometimes under very difficult conditions, still Grasse is doing everything within its power to retain its lead and first rank among the districts engaged in the cultivation of perfume-flower plants.

Since DRUG MARKETS has requested us to outline the situation as regards the raising of perfume-flowers in France, we shall first take up the difficulties we are encountering at the present time, and how the producer or grower hopes to overcome them.

The cultivator-producer of perfume-flower plants feels that the prices paid him for his crops do not give him sufficient profit. He is, therefore, tempted to substitute something more profitable to cultivate than the rose, the jasmine, or the orange flower. The perfumer, on the other hand, must, of course, base his purchase price upon his requirements, taking into consideration the competition met with on foreign products.

The only solution to the problem, therefore, is an improvement in the agricultural technique, thereby increasing the yield or production, and at the same time lowering the cultivation costs all along the line.

It must be borne in mind that the reasons for an increase in the cost price of perfume-flowers are many. And some of them are, indeed, very difficult, if not impossible, to combat.

Take, for example, that important question of small properties and shortage of labor.

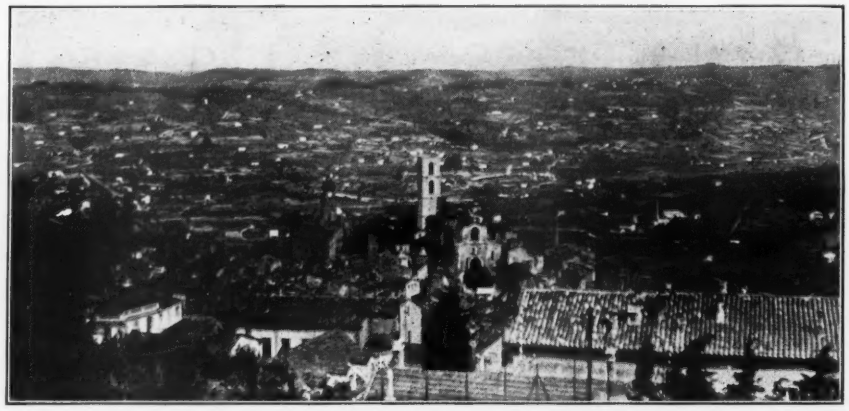
In the region of Grasse, more than in any other part of France, property is very much divided up, fields of more than three to five hectares in extent being the exception. This very fact precludes agricultural activities on any large scale. Even if the necessary provisions were made, still the nature of the soil, and the way the land is laid out in terraces, would make it commercially unprofitable.

Furthermore, it must not be forgotten that the cultivation of perfume-flower plants, lies, one might say, midway between agriculture and horticulture, and it, therefore, requires sufficient labor, thoroughly trained, in order to properly grow the plants so that they will show a maximum yield. Labor of this kind is becoming harder to find each year, and the demands made by it are so high that they have materially increased the prices.

Some one has said: "France is historically a landed property and the Frenchmen socially a peasant; this is the foundation of the country and its people." And so we are in hopes that the rural crisis confronting our country at the present time may be overcome. But for the moment we are obliged to take its effects into consideration.

In the Grasse region the reasons for this crisis are numerous; losses suffered during the war, low birth rate, desertion from the farms and going into con-

struction work or into business on the Riviera. Then there is the political view held with regard to Italian immigration, and which cuts down considerably the number of workers who, in the past, crossed the frontier during various seasons to help gather the flowers. The remedy for this situation would be the establishment of well-regulated, sympathetic policies, as applied to the conditions existing in the Grasse district. There is also the possibility of securing foreign labor other than the Italians who used to do this work, and this is, at the present time, under trial.



A view of Grasse taken May 11 from the plant of Charabot & Company

Production also suffers from the marked fluctuations in the prices received from the distilling perfumers. And then it must be remembered that although it is possible to rapidly modify, cut down or increase manufacturing facilities, this is not true of the fields, where it is impossible, for example, to suddenly replace one type of plant by another. The man who raises corn can do this, perhaps, but if the agriculturist of Grasse should attempt to follow the variations in price by changing from one perfume-flower plant to another, he would be courting ruin. Furthermore, the time element enters into the question, for the grower does not know what the price will be for a certain flower until the full yield is reached that is, at least, three or four years later.

Also, the grower of flowers in the Grasse region is in no position to count upon any fixed profit when he undertakes the cultivation of a certain plant, or plants, for the reason that the perfumers themselves are controlled by the law of supply and demand, which is under the dominating influence of one of the most capricious elements: Fashion.

The agriculturist is, therefore, obliged to turn to a diversity in perfume-flower plants, and to avoid specialization, wherever possible, because of its dangers. For this reason the aim is to introduce in the Grasse district certain new plants which may be profitably grown there, thus doing away with a dependence upon any one species of plant or flower.

Without going into the economic problems involved, and which are, after all, only local, it may be said that from a technical point of view the matters to be solved are practically identical with those existing in other agricultural pursuits: study of the soils, search for the most productive varieties, best ways of fighting insects and plant diseases, the proper use of fertilizers, etc. And a thorough study of these vital questions makes it necessary to have a well-equipped institution, established for the sole purpose of taking up these various problems for solution.

On May 11, the roses of Grasse were plentiful but still only buds

It was with this idea in mind that the business men, the growers, the co-operatives, etc., decided to organize and create

Cleaning and trimming jasmine plants

at Grasse a Garden for Experimental Research, whose work would be to find the most practical and logical ways to solve the problems arising in the cultivation of perfume-flower plants.

The Garden for Experimental Research is also destined to become a teaching organization, the knowledge gained to be taught in the rural schools, embodied in lectures suited to the grower himself, and used for the training of apprentices, in order to rationalize the cultivation of the various types of perfume-flower plants.

In France, agricultural stations similar to the Garden for Experimental Research are, for the most part, government institutions. Although collaboration with official organizations of this character will be sought, still the Garden for Experimental Research will remain a private, unofficial organization. Its founders felt that the time was not propitious to make an appeal to the French government, involving a large financial support in the form of a subsidy. Furthermore, it is only fair that those who will benefit the most from the work of the Garden for Experimental Research should bear the expense.

The Association of the Garden for Experimental Research of the Grasse Region and Southeast was formed with the purpose of grouping those, who, by subsidies of varying amounts, contribute to the work of this institution. Co-operation was received from all sides: growers of flowers, distilling perfumers, co-operatives, societies devoted to scientific study, manufacturing perfumers, French and foreign organizations, as well as a number of individuals, replied to our appeal in so liberal a fashion that the Garden for Experimental Research was firmly established on a property near Grasse, where the field for experimental work and the laboratories are located.

Technical questions are under the direction of a board, including the best known men in the field of French Agronomical Science, such as Messrs. P. Marchal (entomology), Viala (special cultures), Gabriel Bertrand (biological chemistry), Cayeux (geology), Demolon (science of soils), Mangin (botany), etc.

In order to work along the proper lines for the acclimatization of new plants, the Garden for Experimental Research has provided for correspondents abroad (United States, Argentine, Chile, Central America, Austraila, India, etc.) and in the colonies, who are willing to help us by giving their advice and also to obtain for us plants which may be studied.

It would be tedious to go into all of the problems being faced, and it will suffice, therefore, to outline only a few of them in order to show the importance of scientific study as regards the perfume-flower plant.

The most important flowers to study at the present time are the orange blossom, the rose and jasmine.

With regard to the orange flower, the most vital thing to solve is the problem of parasites, like the

(*Continued on page 619*)

Will Fixed Factor Cost Finding Eliminate *Small Order* Losses?

An artificial result is obtained by applying a percentage to find the cost of Selling, Delivery and Burden. It makes the prices of expensive goods still higher, and those of cheaper goods still lower.

By John N. Harvard
R. J. Strassenburgh Company

ALL of the following examples are based on average operating and distribution expenses and in stating costs per product the amount given includes all expenses delivered to stock department.

Direct Selling Cost is remuneration to salesmen.

Delivery Costs includes shipping packages, stock department expenses and transportation.

Burden includes office expenses, administration, sales promotion, advertising, etc.

The method of taking average expenses and applying them to each item to establish a selling price is rather a difficult solution. For instance, if from experience we find that our average expenses are as follows:

Cost of merchandise	30%
Direct Selling Cost	25%
Delivery Cost	10%
Burden	25%
Profit	10%
Selling price	100%

and if we apply the average to establish selling prices, we may be misled particularly on low cost tablets and in comparing tablets with fluids.

For instance, in comparing tablets which cost 42c and $1.20 per thousand respectively.

Cost per thousand	$ .42	$1.20
Direct Selling	.35	1.00
Delivery	.14	.40
Burden	.35	1.00
Profit	.14	.40
	$1.40	$4.00

Here we have a case where one thousand tablets bears 14c of our delivery cost and in another case 40c. It is very evident that in one case the delivery cost is underabsorbed and in the other overabsorbed.

This example is far more striking in fluids.

Cost of Produce	$1.05	$2.70
Direct Selling Cost	.88	2.25
Delivery Expenses	.35	.90
Burden	.87	2.25
Profit	.35	.90
Selling Price	$3.50	$9.00

Here you will find that for delivery cost of the cheaper product we have allowed 35c per gallon which we all know is not sufficient and in another case 90c which is insufficient on a single gallon order.

The unit basis for distributing, delivery and burden particularly I believe is more satisfactory and in line with good accounting and for discussion I offer the following:

Single Thousand Quantities
Delivery per thousand 25c

In Five Thousand Quantities
Delivery per thousand 15c

Delivery per gallon $1.00

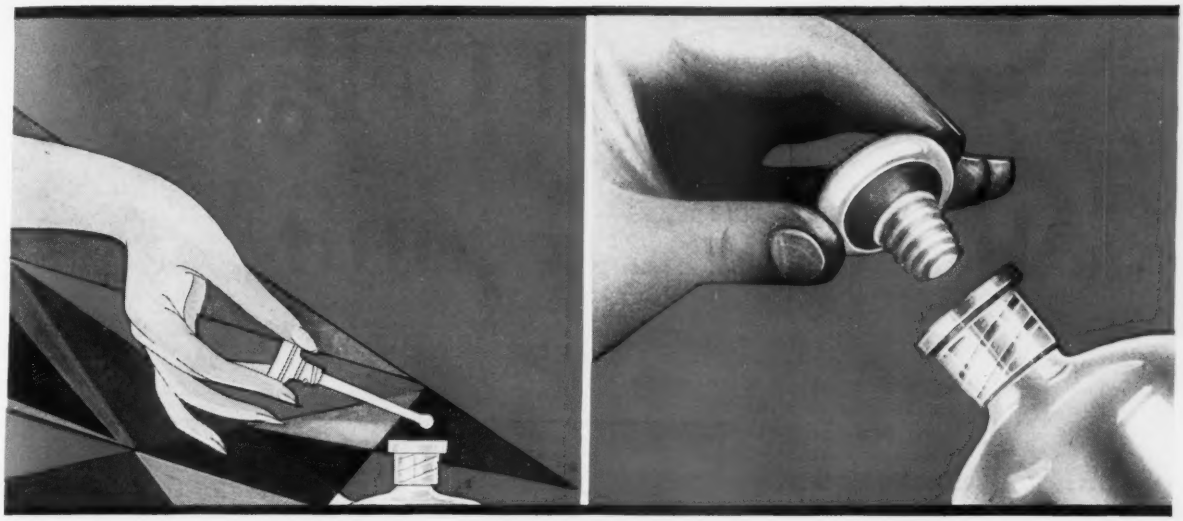
Five Gallon Quantities
Delivery per gallon 70c

burden is, of course, somewhat fixed on monetary values but, however, there is a minimum at which an order may be handled and the following are offered for discussion.

Minimum per thousand 45c

Tablets selling over $2.50 per thousand, 20% of selling price.

Liquids
Minimum per gallon 75c



The New Applicator Rod

NOW you can select an applicator rod in the various colors which Bakelite makes possible, or use the pure white of vitreous enamel (porcelain).

This slender applicator rod, beautifully formed, is moulded in one piece with the seal and stopper. Convenient—easily handled—the stopper and rod simply screws into a thread formed on the inside neck of the bottle.

No matter if your product is destined for Milady's dressing table or the home medicine cabinet, your own design for the bottle and a selection of color for the applicator rod will give you an unusually effective container.

Our tests show perfect protection from evaporation, etc., for iodine, manicure preparations, corn cures, mercurochrome, etc.

May we send you samples? Please state the nature of your product so proper liners may be sent.

The Seal for Distinction

DO you expect the seals you use in your glass containers to give an appearance of quality and character to your product? If you want a striking demonstration of just this effect, walk into any drug store and ask for a bottle of Squibb's Aromatic Spirits of Ammonia, Mulford Mineral Oil, Conti's Castile Soap Shampoo.

The Spring Stopper Seal has been subjected to many rigid tests in nationally known laboratories. It WILL prevent leakage and evaporation, not only in the original seal but for any number of reseals.

Any size or shape bottle may be used with this seal. It is simply necessary to arrange for a thread on the inside neck of the bottle. The Spring Stopper Seal, screws into this thread, making an absolutely tight closure or reclosure.

Let us send you stock bottles fitted with sample stoppers. Please state the nature of your product so proper liners may be sent.

Spring Stopper Co.

165 Broadway, New York, N.Y.

Telephone Cortlandt 1495-1496-1497

Patentee of bottle finishing devices applied to the various types of automatic bottle making machines. Patents in United States, Canada and Foreign Countries.

ESPECIALLY FOR DIFFICULT-TO-SEAL PRODUCTS

Use du Pont Cellulose Caps to build confidence

H. A. METZ Laboratories, Inc., use du Pont Cellulose Caps on their bottled products for two reasons—to double-seal and dress them up

Almost any drug will suffer from exposure if not tightly sealed. It may take up or lose moisture, or lose strength, depending on the formula and ingredients.

So, careful manufacturers avoid the possibility of stoppers becoming loose in transit by using du Pont Cellulose Caps. These sturdy hoods shrink so tightly over the top and neck of the bottle that there isn't a chance for the stopper to jar loose.

The effect on sales is unquestioned. Physician and druggist alike have absolute confidence in the perfect condition of the manufacturer's product when they find du Pont Cellulose Caps used as a final closure.

CELLULOSE CAPS are hoods of cellulose applied moist over the neck and stopper of the bottle. They shrink rapidly as they dry to seal the closure and secure the stopper. Cellulose Caps are made in all colors to fit all closures.

DU PONT CELLOPHANE

CELLULOSE CAPS

Du Pont Cellophane Co., Inc.

Cellulose Cap Division

2 Park Avenue New York City

(Formerly made and sold by Capes-Viscose Inc.)

CAPES-VISCOSE

Preparations selling over $4.00 per gallon, 20% of selling price.

Applying the suggested figures we reach the following results:

Tablets cost per thousand	$ .42	$1.20
Direct Selling	.44	.81
Delivery	.25	.25
Burden	.45	.65
Profit	.19	.34
Selling Price	$1.75	$3.25
Liquids Cost per Gallon	$1.05	$2.70
Direct Selling	1.07	2.05
Delivery Expenses	1.00	1.00
Burden	.75	1.63
Profit	.43	.82
Selling Price	$4.30	$8.20

In reviewing these figures you will find that an average experience application of selling and delivery costs on inexpensive tablets and liquids is not sufficient to absorb delivery and burden while the allowance is excessive on more expensive preparations. In one case based on the average theory we find that a tablet costing 42c per thousand and selling at $1.40 yields a profit of 10% and the unit basis (allowing 25% for delivery and 45c for burden) it would be necessary to have a selling price of $1.75 to yield at 10% profit. The more expensive product using the percentage basis to reach a selling price we find that it would be necessary to sell for $4.20 per thousand to yield 10% profit and using the fixed distribution method we find that the same tablet could be sold at $3.25 per thousand and yield 10% profit.

In liquids the preparation costing $1.05 per gallon, applying average delivery and burden figures, we find they could be sold at $3.50 per gallon and yield 10% and with the other method it would be necessary to sell at $4.30 per gallon to show the proper profit. The preparation costing $2.70 per gallon using the first method would be sold at $9.00 and the second method $8.20.

In conclusion, I believe that the above figures show that we are all handling small orders at a loss due to the method or arriving at selling prices.

Salesmen's Outing June 27 at Summit

The annual outing of the Salesmen's Association of the American Chemical Industry will be held on June 27, at the Canoe Brook Country Club, Summit, N. J.

There will be a number of athletic contests including golf, baseball, horse shoe pitching, discus throwing, baseball throwing, etc. Points will be given for the various contests, and a number of prizes will be awarded according to the point score. For those who do not play golf, an accuracy test with short range golf clubs will be conducted.

W. F. L. Tuttle, of "Chemicals," and Grant A. Dorland, of MacNair-Dorland Co., publishers of "Soap," are in charge of the affair.

{ *Industry's Bookshelf* }

The Pharmaceutical Recipe Book. First Edition (R. B. 1); by authority of the American Pharaceutical Association. Prepared by the association's committee on Recipe Book and Unofficial Preparations, of which J. Leon Lascoff served as chairman and Ivor Griffith as editor. Buckram, 8 vo. $5. Published by the association.

Publication of the Recipe Book makes available to the dispensing pharmacist and manufacturing pharmacist an authoritative source of formulas for preparation which are in demand but are not ordinarily found described in any other formulary or recipe book. It is for this reason that the Recipe Book will supply an important need of the average pharmacist, laboratory worker and manufacturer. It is believed that the book will fulfill the aims of the association in furnishing definite formulas for preparations in fairly common demand but which are not included in the official standards.

The scope of the book can be appreciated by the enumeration of the following departments into which it is divided: Part 1, Pharmaceutical Formulas; 2, Hospital Formulas; 3, Dental Formulas; 4, Laboratory Reagents; 5, Veterinary Formulas; 6, Photographic Formulas; 7, Cosmetic Formulas; 8, Flavoring Extracts; and 9, Technical and Miscellaneous Formulas.

In the statement of general principles followed in the compilation of the book, it is explined that the formulas carry no proprietary or trade-marked names, and that no formula is given with the intention of imitating proprietary or trade-marked articles. English titles are employed to indicate all preparations, the Latin title, when included, being used as a synobym. Working directions are outlined for all formulas. Units of the metric system are used in practically all formulas and the Recipe Books make no claim for remedial action of any drug or preparation, nor does it assume any responsibility for the therapeutic value of any of the formula, nor for the doses specified.

The style and typography of the book closely resembles that of the fifth edition of the National Formulary. The book can be recommended for the laboratory and library of every dispensing and manufacturing pharmacist.

Allen's Commercial Organic Analysis: Treatise on the properties, modes of analysis, and proximate analytical examination of various organic chemicals and products employed in the arts, manufactures, medicine, etc. Fifth edition, revised. Volume VII, The Vegetable Alkaloids, by C. Ainsworth Mitchell, M. A., F. I. C., editor, and a corps of contributors. 8 vo., 869 pages. Cloth, $7.50. P. Blakiston's Son & Co., Philadelphia.

This work has been a recognized authority in the field that it covers and probably all chemists, pharmaceutical or commercial, are more or less familiar with the entire work, or at least with the particular volumes relating to the special work in which they are engaged. Volume VII—The Vegetable Alkaloids—should be found of material value to both the pharmaceutical chemist and manufacturing pharmacist. It has been thoroughly revised and covers the latest researches in the field of analysis.

The general introductory section is by T. A. Henry, D. Sc., and gives in outline general information relating to the subject at hand. This section is followed by another dealing systematically with individual alkaloids other than those which are of special commercial importance in connection with food or drugs. These are arranged in alphabetical order of the names of plants, from which they are obtained, while separate sections are given over to each of the special alkaloids or groups of alkaloids. A short bibliography of standard works is appended to each section.

The scope of the subjects covered is large and the names of special contributors auspicious. In all the present volume should prove a valuable addition to the library of the manufacturing pharmacist or chemist.

{ *Patents Issued* }

UNITED STATES PATENTS

Complex Antimony Compounds

In the manufacture of complex antimony compounds, an antimonyl compound of such a polyphenol as contains two hydroxyl groups in ortho position to each other is made to react with a neutral alkali metal salt of a sulphonic acid of such a polyphenol as contains two hydroxyl groups in ortho position to each other. H. Hahl, Elberfeld, Germany, assignor, Winthrop Chemical Co. Inc., New York, N. Y. United States Patent No. 1,703,732, filed Feb. 10, 1927.

Composition for Therapeutic Use

A process for generating chlorine consists in bringing a chlorine liberator having a substantial part of its surface coated and a substantial part uncoated into interaction with a mineral acid, whereby an immediate action provides a proper primary charge of chlorine and a further action provides for chlorine loss due to absorption and escape. K. Cornell, Branch, N. Y. United States Patent No. 1,704,727, filed Jan. 17, 1925.

Container Stopper

A container stopper consists of a disk of balsam wood and a lamination of liquid-proof substance. K. R. Gitterman, Brooklyn, N. Y. United States Patent No. 1,705,445, filed, Jan. 13, 1928.

Pyridine Derivatives

Halogen substituted 2-pyridine is made by dissolving the 2-pyridone in suitable solvents and then halogenating the dissolved compound. M. Dorhn and R. Dirksen, Berlin-Charlottenburg, Germany, assignors, Schering-Kahlbaum A. G. United States Patent No. 1,706,775, filed Feb. 23, 1928.

Making Menthol

Menthol and its isomers are made by heating the product of condensation of crude cresol which mainly contains meta-cresol and para-cresol and acetone at about 300° C. to effect its decomposition. The decomposition product is then treated with hydrogen in the presence of a hydrogenation catalyst at about 140° C. to 160° C., until eight atoms of hydrogen have entered into combination. The resulting mixture is then subjected to careful fractional distillation. H. Jordan, Berlin-Steiglitz, W. Schoeller, Berlin-Westend and R. Clerc, Berlin, Germany, assignors, Chemische Fabrik auf Actien vormals E. Schering, Berlin, Germany. United States Patent No. 1,706,784, filed Aug. 15, 1927.

Face Powder

The process of making face powder consists in mixing the powdered base of such a powder with a limited quantity of olive oil to coat the individual powdery particles, with the result that a sensible dry yet adhesive powder is obtained. S. Picker, assignor, The Crystal Chemical Co., New York, N. Y. United States Patent No. 1,707,684, filed Dec. 24, 1926.

Toxic Agent

A toxic fumigant consists of a solution of tetrachlordinitroethane in a volatile solvent of the paraffine series. E. P. Kampa and P. N. Hyman, Minneapolis, Minn. United States Patent No. 1,707,727, filed June 6, 1927.

Medical Capsule

A capsule for the treatment of body tissues includes a medicament containing shell with normally inert heat liberating chemicals. This shell is made of a substance which breaks down when the chemicals are active. A perforated casing is provided through which the medicament containing shell may pass as it breaks down. The casing is of soluble material. J. G. Homan, Steubenville, Ohio. United States Patent No. 1,707,762, filed Feb. 5, 1926.

Solution of Hypnotica and Sedativa and Solvents

The solvent consists of a liquid mixture comprising a water-soluble amide of one of the lower members of the fatty acid series and a water-soluble urethane. The new product consists of a homogenous mixture of allylcrotylbarbituric acid, acetamide, ethylurethane and water. W. Kropp, Elberfeld, Germany, assignor, Winthrop Chemical Co., Inc., New York, N. Y. United States Patent No. 1,707,863, filed July 6, 1925.

BRITISH PATENTS

Alcoholates

Alcoholates are prepared from alcohols having more than three carbon atoms by boiling the alcohol with a metal hydroxide. The reaction may be conducted in a fractionation apparatus arranged so that the water produced passes away with part of the alcohol vapor, the excess alcohol returning to the reaction vessel. The alcohol in the condensate, if only slightly miscible with water, may be separated and returned to the reaction vessel. Neither the alcohol nor the metal hydroxide need be anhydrous. Dr. A. Wacker Gesellschaft fuer Elektrochemische Industrie Gesellschaft, Munich, Germany. British Patent No. 304,585, filed Nov. 5, 1928.

Urethanes of Alpha-Phenylcinchonic Acid

These preparations are synthetic drugs and are made by treating alpha-phenylcinchoninic acid chloride with a urethane, or by interaction of alpha-phenylcinchoninic acid amide with a chlorocarbonic ester. Thus, alphaphenylchinchoninic acid ethylurethane is prepared by heating alpha-phenylcinchoninic acid chloride with ethylurethane. R. Wolfenstein, Dahlem, Berlin, Germany. British Patent No. 304,655, filed Han. 8, 1929.

Albumens

Compounds of haemoglobins with heavy metals of two or more stages of oxidation for example: iron-porphyrine compounds, are reduced with such agent as hydro-sulphite or cystein to a lower stage of oxidation, and then combined with bases such as arginine, histamine or nicotine. The products, which may be absorbed on an organic or inorganic carrier, possess therapeutic properties. According to the example, haemine is reduced in aqueous solution with cystein and nicotine is added; the nicotine-haemine compound may be absorbed on starch, animal charcoal or silica gel. Schering Kahlbaum A. G., Berlin, Germany. British Patent No. 304,731, filed Jan. 24, 1929.

Phenol Aminoalkyl Ethers as Synthetic Drugs

Phenyl aminoalkyl ethers are obtained by treating a phenol, containing an unsaturated alkyl group in the ortho position to the hydroxy group but which is not a derivative of an N-acetylaminophenol, with an alkyline dihalide in the presence of an alkaline agent and then combining the resulting halogen compound with a monoalkylamine. The products possess therapeutic properties. I. G. Farbenindustrie A. G., Frankfort-on-Main, Germany. British Patent No. 304,732, filed Jan. 24, 1929.

Paraformaldehyde

Paraformaldehyde is obtained from the products resulting from catalytic oxidation of methanol by washing the products, preferably after cooling, with a warm strong solution of formal, dehyde. It is preferred to cool the products only to such an extent that the temperature of the washing liquid is maintained sufficiently high to preclude the deposition of paraformaldehyde in the liquid during the washing process. An inert gas such as

nitrogen may be added to the reaction products prior to or during washing. In an example, methanol vapor mixed with air and nitrogen is catalytically oxidized at 500 degrees C and the reaction products are cooled to about 50 degrees C and then washed with a 60 per cent. solution of formaldehyde, the temperature of which should not exceed about 50 degrees C. The washing liquid is drawn off as its volume increases, its concentration being retained under the working conditions, and the withdrawn liquid, after a short standing at ordinary temperature, changes to a paraformaldehyde paste. The formaldehyde in the residual gases is recovered by washing with water. I. G. Farbenindustrie A. G., Frankfort-on-Main, Germany. British Patent No. 296,847, filed July 1, 1927.

Menthol

By subjecting synthetic menthol to partial esterification, separating the unesterified form from the esterified portion and saponifying the later, the parent material is divided into fractions of different melting point of which one is of higher melting point than that of the starting material. A similar result is obtained by partially saponifying a menthol ester, separating the liberated menthol from the unsaponified ester, and saponifying the latter. The partial saponification and esterification may be effected in two or more stages. The process is applicable both to crystalline menthol of melting point about 34° C. and to crude synthetic menthol of lower melting point. Howards & Sons, Ltd., Ilford, and J. W. Blagden, South Woodford, Essex, England. British Patent No. 297,019, filed June 8, 1927.

Antiseptic Foot Powder

A phenol ether or phenol ether derivative without free phenolic groups is used in preserving provisions, foodstuffs and pharmaceutical and technical preparations, and for making non-medicinal disinfecting preparations. A disinfecting foot dusting powder is obtained by mixing three grams of acetanisidine with twenty grams of zinc oxide, 27 grams of wheat starch and fifty grams of talc. I. G. Farbenindustrie A. G., Frankfort-on-Main, Germany. British Patent No. 297,074, filed June 14, 1927.

Separating Cresols

Meta-cresol is separated from mixtures, particularly its mixture with paracresol, by treating with urea which forms an addition product with meta-cresol which is separated in crystalline form and decomposed for instance by water, dilute mineral acids or solutions of magnesium or sodium sulphate or calcium chloride, any urea remaining in the meta-cresol being decomposed by hydrolysis. Schering-Kahlbaum A. G., Berlin, Germany. British Patent No. 297,083, filed Aug. 29, 1928.

Medicines for Internal Use

A dietetic or therapeutically active yeast-iron preparation is made by introducing a colloidal basic solution of an iron salt into yeast flotated or suspended in water, separating the solid substances by filtration, and then drying them, as by the use of alcohol and ether and final warming. Matro Ges., Heilbronn-on-Neckar, Germany. British Patent No. 304,895, filed Dec. 24, 1927.

Alkali Tetra Bismuth Tartrates

An alkali tetra-bismuth tartrate, for example sodium tetra-bismuth tartrate, is obtained by adding bismuth hydroxide to a solution of alkali tartrate, containing excess alkali hydroxide, in the cold, and shaking the mixture in the cold until no more bismuth hydroxide dissolves. After reaction, the mixture is filtered from excess bismuth hydroxide, and washed with distilled water. Alcohol is employed to precipitate the product which is filtered and purified. The products are claimed to be curative agents for syphilis and other medicinal purposes and are stated to be less toxic than other alkali bismuth tartrates known. G. D. Searle & Co., Chicago, Ill. British Patent No. 304,956, filed April 2, 1928.

Disinfectants

Disinfectants are produced by incorporating the double compound of urea and meta-cresol, with a neutral or disinfecting powder such as talcum, kieselguhr, or boric acid. The preparations may be used for general or surgical purposes, and it is stated that under the influence of atmospheric or body moisture the compound decomposes to form an emulsion of meta-cresol in saturated urea solution. Schering-Kahlbaum A. G., Berlin, Germany. British Patent No. 305,229, filed Feb. 1, 1929.

Sterilizing Glass Tubes

Glass tubing, immediately it has been drawn, is cut into lengths and the ends of each length are sealed by fusion. The interior of the tubes is thus kept in a sterile condition, and the usual cleaning and sterelization, preparatory to making the tubes into ampules or the like, is unnecessary. J. Dichter, Berlin, Germany. British Patent No. 305,185, filed Feb. 1, 1929.

GERMAN PATENTS

Finger Nail Polish

This preparation consists of wood meal or similar materials such as clay, alone or in admixture in the dry or paste form. W. Hartmann, Berlin-Baumschulenweg, Germany. German Patent No. 467,000, filed May 2, 1926.

Calcium Iodide Preparation

This chemical is made in form easy for medical use and in non-deliquescent state by mixing calcium iodide with at least the same quantity of sodium theobrominesalicylate. Dr. J. Colman, Berlin, Germany. German Patent No. 466,740, filed May 31, 1925.

Solutions with Strong Germ-Killing Properties

Strong solutions of acids, bases or salts, whose concentration is less than one fiftieth normal, are mixed with 0.85 per cent. of salt. The equivalent quantity of potassium chloride, calcium chloride, sodium bicarbonate and the like are used, either alone or admixed, in the place of sodium chloride. A. G. Chemische Werte, Berlin, Germany. German Patent No. 463,333, filed Dec. 5, 1924.

Tetra-Glucosan

Grape sugar is heated under diminished pressure in the presence of slight amounts of metals, or metallic compounds of the iron group, in certain cases in the presence of an indifferent diluent. Dr. J. Kerb, Danzig, Germany. German Patent No. 468,454, filed Nov. 21, 1924.

Bornyl and Isobornyl Esters

Nopine is heated with organic acids in double the molecular quantity in dilute organic solution to a moderate temperature, not exceeding approximately 150 degrees C., whereat terpenes and particularly pinene, can be also used as solvents. Dr. G. Austerweil, Boulogne-on-Seine, France. German Patent No. 468,299, filed Sept. 26, 1925.

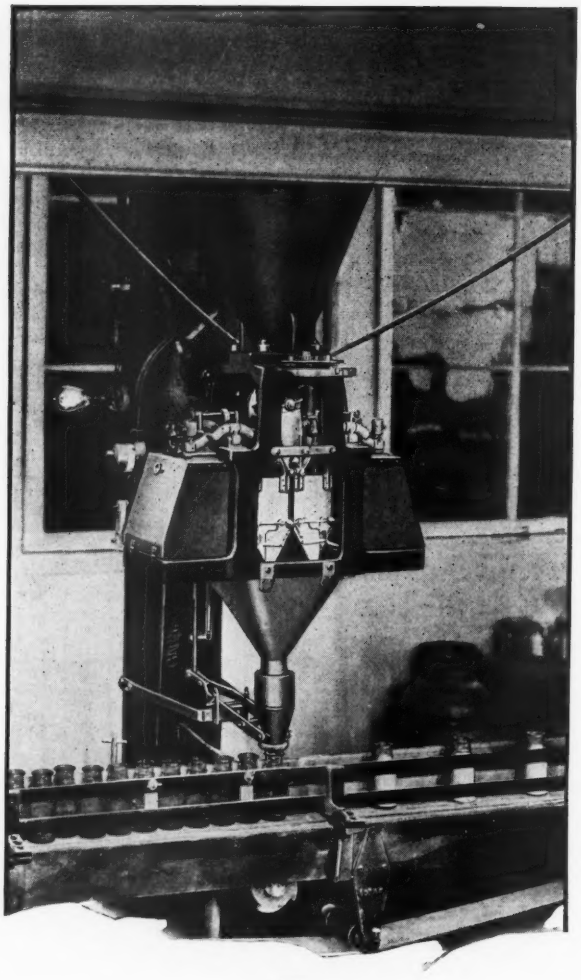
Vanadyl Complex Compounds of Quinoline Series

These are made by allowing vanadyl salt solutions to act upon alkaline solutions of 7-halogen-8-oxyquinolin-5-sulphonic acids and the vanadyl complex compounds formed are separated by acidification. Behringwerke A. G., Marburg, Lahn, Germany, German Patent No. 468,300, filed March 11, 1925.

Lepidin-Containing Quinolin Base Mixtures

These mixtures are made by a catalytic process in which a vapor-forming mixture of aniline and acetaldehyde or paraldehyde is led over three-or-four-valent metallic oxides heated to a temperature of 350° to 550° C. Dr. A. E. Tschitschibabin, Moscow, Russia. German Patent No. 468,303, filed Sept. 15, 1926.

(*Continued on page 621*)



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{ News of the Drug Industries }

Three Foreign Firms Admitted to Membership in A.P.M.A.

Burroughs Wellcome, Charles E. Frosst, E. B. Shuttleworth Become Members — Dr. H. Sheridan Baketel Elected President—Meeting Enthusiastically Attended.

THAT "the international boundary line between the United States and Canada has been removed, pharmaceutically speaking," was the statement of retiring president R. Lincoln McNeil, of the American Pharmaceutical Manufacturers' Association at the annual meeting when the association elected to membership in that organization two Canadian and one English firms. The foreign members elected are: Burroughs Wellcome & Co., an English-owned firm with manufacturing branches in this country as well as in Canada; Charles E. Frosst & Co., Montreal; and E. B. Shuttleworth Chemical Co., Toronto. These firms are now active members of the association. Other members elected are: G. W. Carnrick, active member; and Carr-Lowery Glass Co., associate member.

Dr. H. Sheridan Baketel The New President

Dr. H. Sheridan Baketel, president of Reed & Carnrick, Jersey City, is the newly-elected president of the association. Other officers elected are: First vice-pres., E. T. Crowe, Nat'l Drug Co.; 2nd vice-pres., H. C. Osterman, Central Pharmacal Co.; Secretary, J. D. Searle, G. D. Searle Co.; Treasurer, F. A. Mallett, Standard Chemical Co. Three new directors were elected: R. Lincoln McNeil, Robert McNeil; F. A. Rostofer, Columbus Pharmacal Co.; C. D. Smith, C. D. Smith Pharmacal Co. The board of directors consists of nine members, three of which are elected each year. Other members of the board are: J. E. Bartlett, R. M. Cain, R. R. Patch, Dr. A. S. Burdick, Dr. C. H. Searle, H. F. Snider.

Heretofore the president of the association also acted as the chairman of the board of directors of the association. This was changed and a separate office of chairman of the board was created. The board will elect its own chairman.

The business sessions of the association which were very well attended, opened Monday, June 3, with the calling of the roll. The principal business at this session was the address of the president, R. Lincoln McNeil. Mr. McNeil said in part:

"With regard to state legislation, there have sprung up a number of ill-advised bills that did not reflect to the best interests of the physician and druggist. The association, through the efficient work of the New York office, aided by our Legislative Committee, has been instrumental in removing the objectionable features of these bills or defeating them. This has been no small task, for there have convened during the year 90 per cent of the legislatures of the various states. (Pennsylvania alone had a total of 2,802 bills presented at its last session, multiply this by 43 states, and we have cause to be grateful that we have survived this ordeal so satisfactorily). Summarizing our position as to business generally and in regard to national and state legislation, I would say that our association is in thorough accord with the constructive policies of our government and that we have given active support to every movement having as its objective the best interests of pharmacy and medicine.

"Since our last meeting a contact with the government has been made between the Division of Simplified Practice of the Department of Commerce and our Committee on Standardization of Glass Containers. A representative from our association has met with representatives from other affiliated associations and government officials on three occasions, as a result of which there is now under way a survey which will be the basis upon which a final report will be made as to standardization of glass containers. The accomplishment of this will effect a tremendous saving to pharmaceutical manufacturers. A detailed report to be given by this committee at this meeting will be of great interest to all.

"The most important government conferences this year, as in previous years, have been those with the Contact Committee of our Association and the Contact Committee of the American Drug Manufacturers' Association in conjunction with the Food, Drug and Insecticide Administration. There were two conferences held during the year, one in December and the other in March. At these meetings the work on tablets, with a few exceptions, was concluded and the study of ampuls begun. In the case of the latter a fundamental decision has been reached; namely, that an ampul is a container and not a dose. This, as you know, has been a controversial subject for several years, and to have reached an agreement upon it is a noteworthy achievement. The Combined Contact Committees have recently published their findings in the form of a loose leaf book entitled "pharmaceutical Standards including Tolerances and Methods of Assay." This gives to the government and the industry a permanent record of satisfactory standards of manufacture that was sorely needed and when more comprehensive will equal in importance the United States Pharmacopoeia and National Formulary. It represents the results of five years of continuous co-operative effort and is a most creditable accomplishment. At one of our recent conferences one of the officials of the administration stated that when the industry and the government had the same facts the same conclusions were reached. It is highly complimentary to the government, as well as to the industry, that this harmony and mutual accord exist. When we first met in Washington to study these problems our chemists and the government chemists met in separate groups and later met and formally exchanged data. Now problems are solved at one conference where both the government chemists and those representing the industry meet to discuss assay methods and more quickly and more satisfactorily reach their conclusions. Indeed, at the last conference representatives of the medical profession were also present and were of considerable assistance in solving certain questions that arose with regard to ampuls.

"Our new Research Board is now organized and ready to proceed with its work. You will recall the resolution passed at the semi-annual meeting that this board be composed of the chemist of each member-firm and that the Contact Committee become the executive committee of the Research Board. This arrangement, at the suggestion of Mr. Dunn, was a most constructive method of co-ordinating Contact Committee work with the proposed program of research. Member-firms who have not become affiliated with this new Research Board are missing one of the most valuable association connections and should become identi-

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WIRE FABRICS
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fied with it without further delay. We must bring before the medical profession the value of the use of drugs in the treatment of the sick. Our association has consistently held the opinion that the laity whenever sick should consult a registered physician, who should have the privilege of prescribing or dispensing medicine without restriction. Now that the problem of distribution is well along, I believe that the subject of publicity would be the logical topic to feature for next year's work. I will refrain from mentioning the work of the other committees and will emphasize their importance and value to you when their reports come before the session.

Washington Representative Not Selected

"Of the resolutions adopted at last year's meeting, all of the ten subjects have been either concluded or developed as far as it was possible to do this year. The one resolution causing most deliberation was the selecting of a Washington representative. No definite decision has yet been made, though a great deal of effort has been expended to find a man measuring up to our qualifications who will work for the available salary. There is every indication that a selection will be made during the summer months, so that in the fall we may have this added service.

"At this time mention should be made that the association service on trade names, bio-assays, alcohol bonds, and products liability insurance is satisfactorily meeting the requirements of the membership. During the year a property damage clause was agreed upon to be added to products liability insurance policies for those who sold their merchandise for other than human consumption. This clause was originally quoted by the insurance company at $25.00 per $1,000.00 protection, but after conferences with our officers was finally reduced to $5.00."

President's Recommendations

Mr. McNeil made the following recommendations to the association:

1. That at the beginning of each fiscal year a survey be made to ascertain which subjects are of greatest interest to the members and on which committees they prefer to serve, and that a program of the year's work be compiled from the data collected and presented to the Executive Board for approval.

2. That the next semi-annual meeting be held in Washington, at which time closer contacts could be made with the government officials, and that the Research Board convene at this meeting.

3. That at the annual or semi-annual meeting an associate members' session be held, at which time there may be presented to the active members any subject which any member of that group may care to present.

4. That every opportunity to come into closer relation with the medical profession be taken advantage of, particularly with regard to research work, publicity, and such subjects of mutual concern.

The second session held Tuesday morning was devoted to the report of the Committee on Distribution Problems under the Chairmanship of F. A. Mallett. Mr. Mallett presented the opening paper in which he stated that the problems of distribution had been divided into three parts for the work of the committee: 1. Standard Classification of Distribution Costs; 2. Ways of Greater Efficiency and Economy; 3. Census of Distribution.

A paper by Paul Klemptner, G. D. Searle Co., was read by John D. Searle. Mr. Klemptner emphazised the importance of setting up standards and a method of budgetary control to govern distribution.

J. F. Stiles, Abbott Laboratories, presented a paper, "Greater Efficiency and Economy in Selling and Delivering Pharmaceuticals," which was read by Mr. Mallett.

A. L. Raithel's paper, "Relative Merit of a Sales Campaign Based on Quality vs. One Based on Price," was also read by Mr. Mallett.

The third session held Tuesday afternoon was devoted to legislation, and opened with the report of the Committee on Trade Names of which Ralph R. Patch is chairman. This was followed by the Report of the Prior Rights Board and the two reports were discussed at the same time. The main point brought out at this discussion was the fact that the recent decision of the Prior Rights Board in the case of Drug Products Co. and clarified to the extent to which the Prior Rights Board would go in protecting claims of members. The decision in question practically stated that the board would go no farther in its protection of members than the patent and trade-mark laws go.

The report of the Legislative Committee was given by Chairman C. D. Smith, and included in his report was the report of the Counsellor to the U. S. Chamber of Commerce.

Dr. Durrett Answers Questions

The morning session concluded with a talk by Dr. J. J. Durrett, Drug Control Officer of the Food, Drug & Insecticide Administration of the Department of Agriculture, who discussed the labeling of products and answered questions on specific problems.

The opening session Wednesday morning was devoted to Sales Promotion. The first report at this session was that of J. H. Foy, chairman of the Committee on Business Policy. Mr. Foy reiterated his recommendation of last year that an "Institute of Manufacturing Pharmacy" be created. He called attention to the good that has resulted as the result of such institutes in other industries.

The report of the Publicity Committee was given by Fred A. Lawson, chairman. Mr. Lawson displayed the space given association by the various publications which at the advertising rates of the papers amounted to over $4,000. Special mention was given to DRUG MARKETS, "Drug Trade News," and "Oil Paint & Drug Reporter."

Walter Lee Rosenberger, Robert McNeil, displayed the advertising campaign that has been carried on by his firm in the interests of the doctors. He offered the campaign to the association.

Dr. Doran Gives Reassurances

Dr. James M. Doran, Prohibition Commissioner, next addressed the meeting and pledged the co-operation of his department in the application of the Prohibition Law.

The Committee on Sales Problems under the Chairmanship of Dr. H. Sheridan Baketel, opened its session with an introductory paper by Dr. Baketel. Papers were presented by G. R. Flint, Flint, Eaton & Co., W. J. Burke, Maltbie Chemical Co.; Edwin G. Strassenburgh, R. J. Strassenburgh & Co.; and R. F. Spalding, G. D. Searle Co.

The final event on the program of the Sales' Committee session was a dramatic presentation of a sales argument by Professors R. C. Borden and A. C. Busse of New York University.

The final open session on Thursday morning was devoted to Standardization and Laboratory Control. The opening report was that of C. C. Doll, Zemmer Co., chairman of the Committee on Standardization of Glass Containers. Mr. Doll stated that 60% of the members of the association are using opal ointment jars, 35% using amber jars, and 5% using blue glass and tin decorated containers. He stated that a meeting on simplification and standardization had been called by Secretary Braitwaithe, of the Department of Commerce, in June, and again in December. Mr. W. L. Rosenberger attended the meetings.

Mr. Rosenberger told of what took place at these meetings and discussion of his report followed. It was finally concluded that there was no unaminity of thought among the members, and that while all the members knew what they wanted, they were quite unwilling to accept what the other fellow wanted.

R. M. Cain, Chairman of Committee on Simplification and Standardization of Catalog, reported for his committee. In discussing the revision of the book, Standard Titles and Formulas, and the changes in these titles caused by the recent activities of the Food, Drug & Insecticide Administration, Mr. Cain said:

"Among the names that are definitely not accepted are such names as 'Anti-Malarial,' 'Grippe,' 'Cough,' 'Rheumatic,' 'Tonsillitis,' 'Edema,' 'Dyspeptic,' 'Diarrhea,' 'Cholera Infantum,'

'Migraine,' 'Kidney,' 'Nephritis,' 'Leucorrhea,' 'Vaginal Astringent,' 'Incontinence,' etc.

"Among those on the border-line are 'Rhinitis' and 'Neuralgia."

"Those names that are satisfactory for the present are 'Cathartic,' 'Diuretic,' 'Laxative,' and 'Sedative,' if, in fact, the formulas of these products are made up of such drugs and in proper therapeutic dosage known to produce the therapeutic effect which the title indicates."

Dr. Charles E. Vanderkleed, Robert McNeil, read the report of the Contact Committee of which he is chairman. In his report Dr. Vanderkleed included the report of the Research Board.

Dr. Boyd on Botanicals

Dr. Linn J. Boyd, of the New York Homeopathic Medical College and Flower Hospital, delivered an address on his recent work on botanicals. Dr. Boyd said that the future of botanicals is purely economic. If the active ingredients can be synthesized more cheaply than they can be obtained in thedrugs, botanicals will disappear.

There has been a steady decline of interest in botanicals ever since the discovery of bacteria. Following the discovery of bacteria the belief was quite commonly accepted that disease could only be overcome by the introduction of anti-bodies. Only the belief was accepted that only a substance with a protein nature can introduce an anti-body. As very few botanicals contains proteins, the long list of them were thought useless.

In his research Dr. Boyd has proven conclusively that the conditions found in the laboratory are not the conditions found at the bedside. In other words working with normal animals give results that are very unsafe.

As a contradiction to the thought that only protein substances can produce anti-bodies, Dr. Boyd spoke of his work with baptesia in typhoid fever where anti-bodies were stimulated. The reason why it is not a fact that only protein substances can produce anti-bodies lies in the complex polysaccharites, said Dr. Boyd.

Dr. Boyd said that there has been no real research done in therapeutics. As a proof that anti-bodies are not all together necessary to cue infectious disease, Dr. Boyd said that he had infected 900 giunea pigs with pneumonia. Using bryonia the death rate was lower than with the use of any other substance. Yet anti-bodies were not induced.

That pharmacology will be completely rewritten within the next five years is Dr. Boyd's opinion. He stated that there is a renaissance going on in therapeutics. The patient is tired of having the physician telling him to go and get well or die.

The banquet of the association was held on Wednesday evening, Charles Wesley Dunn presided as toastmaster. Dr. W. C. Woodward, Director of Bureau of Legal Medicine and Legislation of the American Medical Association was the first speaker. He was followed by Dr. Eugene L. Fiske, Medical Director, Life Extension Institute.

Resolutions Adopted

Resolutions adopted by the association at its final dinner meeting Thursday evening are:

1. *Resolved* that the association endorse the recommendations made by President McNeil in his annual address, namely:

(a) That the incoming administration issue a questionnaire to members to ascertain the association action desired by them during the next year and formulate a program accordingly.

(b) That the semi-annual meeting be held in Washington in conjunction with a meeting of the research board.

(c) That a part of the semi-annual meeting be given to associate members for the presentation of any matter of interest to active members.

(d) That the association actively co-operate with the American Medical Association in the advancement of the professions of manufacturing pharmacy and medicine.

2. *Resolved* that the association recommend the creation of special committee duly representing the professions of manufacturing pharmacy and medicine to confer with the United States Department of Agriculture upon the labeling of pharmaceutical products in order that the principles of such labeling shall be clearly and duly defined for the information of all concerned.

3. *Resolved* that the association contact with the leading medical colleges in the advancement of the science of manufacturing pharmacy.

4. *Resolved* that the association endorse the efforts of the American Pharmaceutical Association to create a pharmacy corps in the United States Army.

5. *Resolved* that greater economy and efficiency in distribution be the primary subject of consideration at the next annual meeting in order to continue the study so efficiently begun this year.

6. *Resolved* that the association express to the United States Department of Agriculture its appreciation of the constructive co-operation given to the joint contact committee.

7. *Resolved* that the association express to R. Lincoln McNeil its deep and grateful appreciation of his distinguished and able administration of its affairs during the past two years which has made the association an instrument of large service to manufacturing pharmacy.

Parke, Davis in New Plant

Parke, Davis & Co. are now occupying their new Detroit building, a six story structure of more than 331,000 square feet of floor space. Work on the building, which is of reinforced concrete was started exactly a year ago.

Besides facilities for manufacturing various pharmaceuticals, the new unit has storage rooms and air-conditioned rooms for packaging of certain preparations which have a tendency to absorb moisture from ordinary air.

One of the distinctive features of the construction is a special carrier equipment used for removing fumes and dust from the grinding rooms and the granulating room and also for air-conditioning the poison room.

Rose Oil Advances

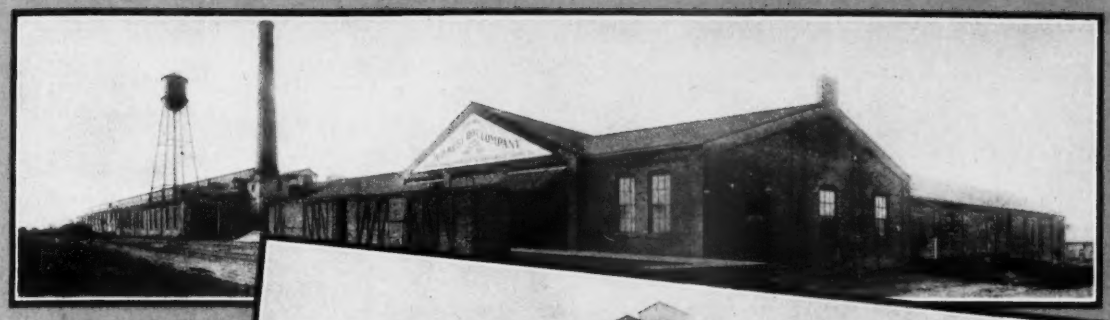
Earlier predictions of higher prices for rose products are being fulfilled. The abnormal weather conditions which prevailed in France and Bulgaria last winter have had an adverse effect on the rose plantations in both countries while in Bulgaria the situation has been aggravated by the damage done last year by a parasitic disease attacking the plants.

Advices to Ungerer & Co. from Botu D. Pappazoglou, indicate the distillers are compelled to bid against each other for flowers and already some buyers have offered as high as 20 Levas per kilo to the peasant proprietors.

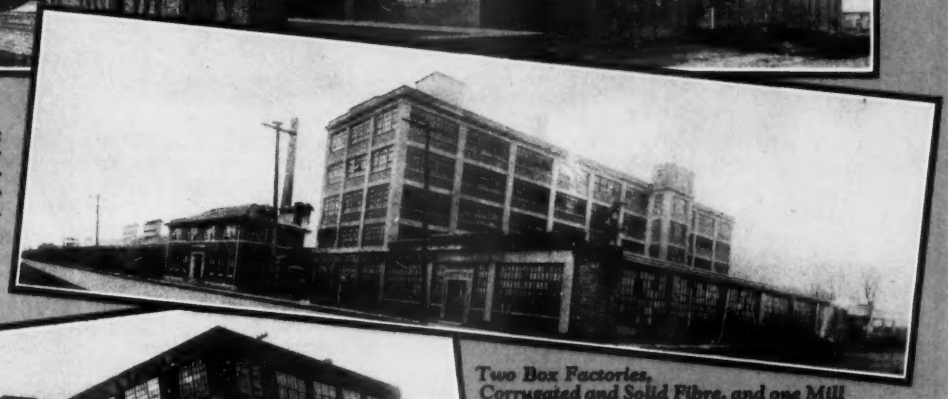
Under such circumstances and with the French production below normal it is a certainty that nothing in the way of easier prices for rose products can possibly be expected before next year. No serious shortage is yet indicated but the danger is by no means remote, especially if the yield of essence turns out to be lower than usual.

Apex Products Corp., newly formed, announce the purchase of all rights and formulae for the Apex Moth Cake from the Apex Laboratories, Inc., Chicago. Melville Keim has been elected president of the new corporation and Robert P. Gust Co., Inc. has been appointed to handle sales where Gust offices are located. An extensive advertising campaign has been prepared to introduce this new moth killer.

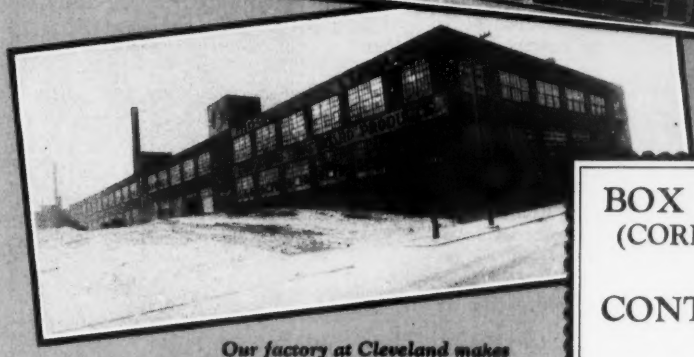
George B. Evans Chemical Co., Philadelphia has appointed the Philadelphia office of the Chas. C. Green Advertising Agency, Inc., New York, as its advertising counsel.



Our Straw Board Mill at Circleville, O., makes for us all the straw for corrugating used in our Corrugated Box factories.



Two Box Factories, Corrugated and Solid Fibre, and one Mill making Test Liners and Chipboard form an important group unit of our organization at Cincinnati.



Our factory at Cleveland makes corrugated containers and 98% of all Mazda Lamp wrappers in this country.

EXHIBIT
No. 3 of a Series

BOX FACTORIES AND MILLS
(CORRUGATED and SOLID FIBRE)
of the
CONTAINER CORPORATION
OF AMERICA
and MID-WEST BOX COMPANY
IN OHIO

THE Ohio group of box factories and mills is an important one in our industry.

Cleveland, on the north, one of the original "Consistent Quality" plants of the Mid-West Box Co. group, merged with the Container Corporation of America in 1926, is primarily notable for the fact that it produces 98% of all the Mazda Lamp wrappers made in this country. In addition however, this factory supplies large quantites of quality corrugated containers for Ohio, Michigan, Western New York and Western Pennsylvania.

Cincinnati, on the banks of the Ohio, has two box factories making Corrugated and Solid Fibre quality containers for Ohio, Indiana, Kentucky, Tennessee, West Virginia, Virginia, North Carolina, South Carolina and other Southern States. The mill supplies Test Liners and Chipboard for containers.

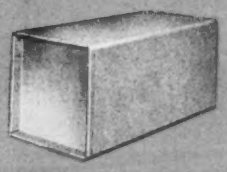
Our mill at Circleville manufactures straw for corrugating.

OTHER FACTORIES AND MILLS

at Philadelphia (Manayunk), Pa., Fairmont, W. Va., Charleston, W. Va., Natick, Mass. and Bridgeport, Conn., (except Chicago, Illinois, Anderson, and Kokomo, Indiana plants previously shown in this series). —

WILL BE FEATURED IN LATER INSERTS

A Great Variety of Goods — Fragile, Solid *and* Liquid Now Packed in Fibre Board Containers

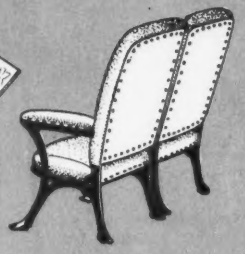


Pilferproof Recessed End Shipping Box

Matches

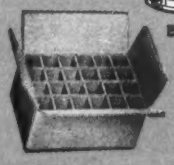
Shoes

Tobacco, Cigars Cigarettes



Opera Chairs

Everything in Cans



Reshipping Case for Bottles and Bottled Goods

Toys — All Kinds

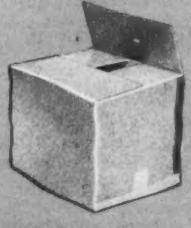
Lamp Wrappers

Electric Light Bulbs

Dry Cell Batteries

Soaps, Washing Powders and Flakes

Milk, Preserves, Etc.



Sleeved Carton for all Commodities

We Offer Our Great Experience in Designing Special Boxes for Difficult Packings

THE great importance of a strong, safe properly constructed and reinforced package, so strongly emphasized by railroads, has automatically developed a Research Department within our organization of which we are justly proud. The work of this department deals with difficult packing and shipping problems of shippers and solutions that will satisfy customers and save them money. The results attained to date are to say the least, remarkable. Fragile and odd shaped products are now shipped in fibreboard boxes and delivered at destination in perfect condition—at lower cost. What are your problems? Write us for the FREE service of our Research Engineers. No obligation at all. See COUPON.

Some Industries Now Using Our Solid Fibre or Corrugated Boxes

Bakery Goods	Furniture	Shoes
Canners	Stationery	Breakfast Foods
Building Material	Lamps and Shades	Proprietary Remedies
Sporting Goods	Tobacco—all forms	Spices
Books and Magazines	Perfumery	Foods—All Kinds
Toys	Paints and Varnishes	Instruments
Crockery	Automotive	Brooms, Brushes, Etc.
Bottlers	Glassware	Ceramics
Fruit Packing	Insecticides	Leather Goods
Radio Goods	Rubber Goods	Doors
Pictures	Electrical Goods	Hardware
Vegetable Growers	Men's, Women's and Children's Furnishings	Dry Cell Batteries
Meat Packing	Millinery	Enamelware
Dairy Goods	Confectionery	Filing Cabinets
Soap and Chips and Washing Powders	Carpets and Rugs	Electric Light Bulbs
Matches		

CONTAINER CORPORATION
OF AMERICA
and MID-WEST BOX COMPANY

111 W. Washington St. Chicago, Illinois

Six Mills — Twelve Factories — Capacity over 1200 tons per day

RETURN COUPON

CONTAINER CORPORATION OF AMERICA
111 West Washington Street, Chicago

Gentlemen: Please have one of your experts check our present packing and shipping methods—without obligating us—for the purpose of reducing our costs if possible.

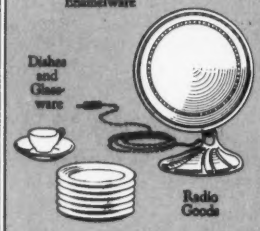
Name_____

Title_____

Firm_____

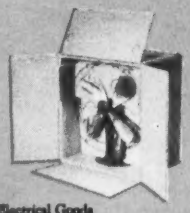
Address_____

Pottery and Enamelware



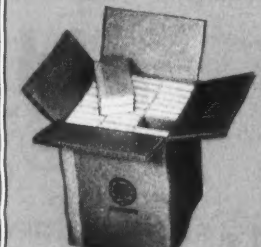
Dishes and Glassware

Radio Goods



Electrical Goods

Reflectors



Enameled Tile

Wherever goods are manufactured — there you will find our boxes reducing packing and shipping costs.

Washington News

Washington, D. C.—With the appointment and organization of President Hoover's special commission to investigate law enforcement, it is becoming apparent that transfer of prohibition administration from the Treasury Department to the Department of Justice, suggested by the President in his inaugural address, will be postponed for at least a year, if, indeed, it is ever put into effect. This is the confident belief of drug trade representatives, who have been consistently fighting any such transfer.

It appears that officials of the Hoover administration have become convinced that it would not be practical to transfer all prohibition work to the Department of Justice. They prefer a plan of co-operation and co-ordination among the government bureaus concerned with the prohibition enforcement problem, including the work of prosecution in the Department of Justice, the Customs Service, Internal Revenue Service, Coast Guard, and the permissive work having to do with alcohol and liquor permits, etc. Dr. J. M. Doran is favored in certain high quarters for the task of generally supervising prohibition work.

Dr. Doran Endorsed

This idea is approved by alcohol using trades, which have endorsed Dr. Doran to the limit for his experienced, impartial carrying out of the difficult task of prohibition administration. Resolutions of the American Drug Manufacturers' Association and of other branches of the drug trades and alcohol using industries opposing prohibition transfer to the Department of Justice have only recently been submitted to president Hoover.

However, these interests have not been uniformly successful in dealing with the President in connection with the prohibition question and the problem of law enforcement. For example, Dr. Harrison E. Howe, secretary of the Alcohol Trades Advisory Committee, is understood to have sought opportunity to present the views of the alcohol interests in an interview with the President. He is reported to have been advised by the White House that an interview would not be necessary; that it would be sufficient to submit suggestions in writing. Again, Dr. S. L. Hilton and others constituting a committee representing the American Pharmaceutical Association, presented to the President the name of a man for appointment to the law enforcement investigation commission. While the name was not made public, it is understood in drug trade circles that it was that of Dr. Beale, of Urbana, Ill. The personnel of the Commission, as announced at the White House, does not include Dr. Beale.

Willebrandt Resignation Significant

The appointment of the commission virtually coincided with announcement of the resignation of Mrs. Mabel Walker Willebrandt, Assistant Attorney General of the Department of Justice, who had been for years in charge of prohibition, narcotic, customs and internal revenue law prosecutions. While the official version of this event and the statements of Mrs. Willebrandt agree that it is purely a matter of business with her, the general belief is that there is something significant about the resignation occurring at this time, in view of the postponement of transfer of prohibition administration to the Department of Justice and appointment of the law commission including a woman other than herself. Mrs. Willebrandt has been one of the chief reasons for opposition of alcohol using interests to this transfer.

Prohibition will be investigated, along with other phases of the crime and enforcement situation, by different groups of the commission headed by former Attorney General Wickersham. The commission will have the use of $250,000 appropriated by Congress last session for an inquiry into prohibition enforcement.

Drug trade interests are arousing opposition to an amendment to the tariff bill reported by the Ways and Means Committee and adopted by the House of Representatives just before passing that measure, increasing the tariff duty on imports of menthol from 50 cents a pound to 75 cents a pound. It is understood that certain branches of the trade have organized to fight this increase to the limit on before the Senate Committee on Finance and in the Senate itself. The committee meets June 11 to take up the tariff for hearing.

The menthol increase appears to have been recommended by the Ways and Means Committee in the interest of domestic peppermint producers. Apparently it would benefit domestic producers of synthetic menthol, if any. Large quantities of menthol are required in this country in the manufacture of salves, ointments, cough, cold and headache remedies, and other preparations. The foreign supply is reported to be controlled in Japan.

Authority to pay for information of violations of the narcotic law is proposed in a bill introduced by Representative Hamilton Fish of New York, who also proposes to provide for deportation of aliens guilty of violating the law. Mr. Fish has urged the State Department and the President that the United States should be represented on the League of Nations commission to control narcotic drug manufacture, or at least that an American citizen should be appointed to that commission.

Narcotic Board Under Fire

The Federal Narcotics Control Board has been criticized by Ellen LaMotte for being too liberal, as alleged, in making the allotment of imports of crude narcotic materials. However, board officials and its friends in the drug trade assert that such criticism is not justified.

Drug control work continues to run at full blast with the throttle wide open at the Food, Drug and Insecticide Administration. At the annual meeting of field experts of the Administration, it is learned, it was decided that every drug manufacturer should have his plant visited at least once during each year. The government inspectors are under instruction, it is understood, to specialize in products involved in particular projects on which the Administration is concentrating its guns, but they are expected at the same time to make at least a cursory examination of all products manufactured in each plant visited.

Inspection of Drug Plants?

Drug trade representatives declare that there is no specific authority in law for inspectors of the Administration to inspect drug manufacturing plants. However, the regulations provide that such plants may be inspected, and it is understood that it has been the general policy of the manufacturers to permit inspection of their plants and to co-operate to a reasonable extent with the Food, Drug and Insecticide Administration agents.

It is stated that the inspectors have been instructed not to advise manufacturers how to label their products correctly. Instead, the manufacturers will be required to consult officials of the Department in Washington about such matters.

More work than ever will be done and more time spent, during the fiscal year beginning July 1, 1929, in work on drugs and medicinal preparations, according to announcement by the Food, Drug and Insecticide Administration. The plan is to concentrate the work of food control on a comparatively few special projects. In this way, it is believed, men who have been engaged on food control can be shifted to the drug control division.

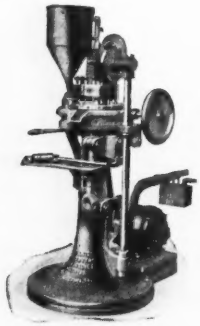
The program of activity for the latter according to various official announcements and unofficial reports, include projects for dealing with several classes of preparations such as remedies for piles, for rheumatism and related diseases, and for malaria. The campaign against influenza remedies is being wound up. The

Use the STOKES *line of* Pharmaceutical Machinery

Steam-heated Water Still

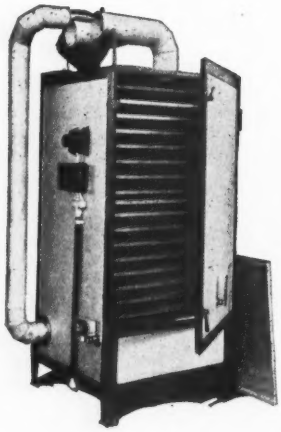
Laboratory and Production sizes. Efficient, economical, convenient, durable.

Tablet Making Machines
Drying Closets
Jacketed Kettles
Drug Mills and Mixers
Molds of all types
Bottle Washers
Percolators
Conveyors
Alcohol Recovery Apparatus
Vacuum Pans and Dryers
Water Stills
Tube and Jar Fillers
Powder Fillers
Special Machinery



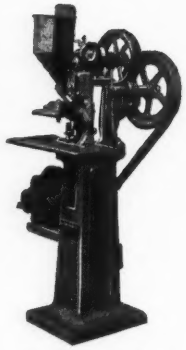
"B" Tablet Machine

The well known STOKES Rotary Tablet Machine. Available in hand and power operated models. Rapid, convenient, rugged, reliable and durable. Special catalog on request.



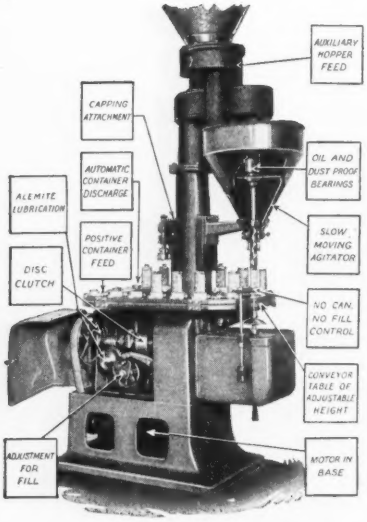
Drying Closet

Compact—occupies 3′ x 4′ floor space. Efficient—hot air rapidly recirculated. Economical. Conforms to Underwriters' requirements.



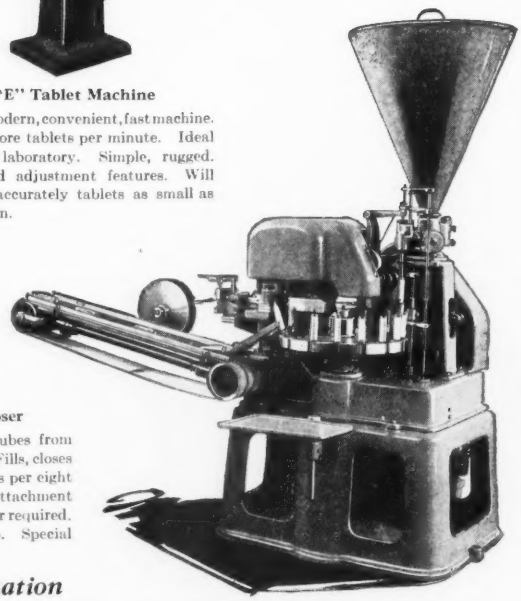
"E" Tablet Machine

A new, modern, convenient, fast machine. 100 or more tablets per minute. Ideal for any laboratory. Simple, rugged. Improved adjustment features. Will produce accurately tablets as small as 1/20 grain.



Powder Filler

Full automatic model for drugs, chemicals, practically all powders, with attachments for auxiliary feed, capping, and automatic container discharge. Basic model without attachments available. A new machine. Modern, simple, compact, quiet. Special folder on request.



Tube Filler and Closer

Full automatic. Handles tubes from smallest up to 7″ in length. Fills, closes and clips 125 gross of tubes per eight hour day. Clip-forming attachment pays wages of the one operator required. Hand operated models also. Special folder on request.

Write for information

FJS STOKES MACHINE COMPANY

Pharmaceutical Machinery since 1895

5932 Tabor Road, Olney P. O., Philadelphia, Pa.

project involving cod liver oil preparations, on which the Department began work some time ago, is being revived with the issuance of a long statement by the Department on the subject. A resurvey of antiseptics is also in the offing.

To assist in these lines of work the Department will have the assistance of Dr. George E. Clarke, of Cleveland, Ohio, beginning June 1, who will specialize as a medical man in drug control work under Dr. J. J. Durrett.

Tariff Bill Chemical Changes

The Hawley Tariff Revision Bill, passed by the House on May 28 includes changes in many medicinal chemicals. The attempt to place an increased duty on blackstrap molasses failed and the duty on this raw material for alcohol manufacture remains unchanged. The bill is now in the hands of the Senate Committee.

Important changes in the new bill are tabulated below:

Product	*Present Rate*	*New Rate*
Acid Citric.....lb.	17c	18c
Acid Tannic, Medicinal.....lb.	20c	22c
Tartaric Acid.....lb.	6c	8c
(Duty of 1c lb. on Argols, the raw material has been removed)		
Barium Dioxide.....lb.	4c	6c
Calomel and other mercurials..lb.	45%	22c and 25%
Phenol, Metacresol, Orthocresol lb.	7c	20% and 3c
Epsom Salts.....lb.	1½c	1c
Snythetic Camphor.....lb.	6c	1c
Menthol.....lb.	50c	75c
Olive Oil (Weighing with immediate container less than 40 lbs. lb.	7.5c	8.5c
Spermaceti Wax.....lb.	...	6c
Grapefruit Oil.....	...	25%
Wool Grease.....lb.	½c	1c
Potassium Permanganate.....lb.	4c	6c
Potassium Citrate.....lb.	...	18c
Sodium Oxalate.....lb.	...	3½c
Sodium Phosphate (except Phosphate, containing by weight less than 45% water).....lb.	½c	1c
Sodium Phosphate (Not specifically provided for).....lb.	½c	2c
Strychnine and salts of.....oz.	15c	20c
Collodion Emulsion....	...	25%

R. Hillier's Son Co., Inc., after June 1, will not accept orders for less than five pounds of any one item. Contrary to wholesale trade practices, they, as importers and drug millers, have shouldered the heavy burden of carrying stocks for manufacturers as well as for the jobbing druggists; they only ordering what was required for immediate use.

The expense has grown to such large proportions on this class of trading that no profit remained and the minimum of five pounds was made necessary.

P. R. Dreyer, Inc., are in receipt of advance information from their principals, Bertrand Freres, relative to the coming supplies of rose and orange products.

Rose floral products are scarce and while no definite price has as yet been fixed the producers are compelled to pay 30% more or the flowers than they paid in previous years.

R. G. Callmeyer, for more than thirty years identified with the essential oil industry, has resigned as vice-president of Wangler-Budd Co., Inc., importers of perfumers' raw materials, this city. After an extended rest Mr. Callmeyer will decide on his future activities.

Francesco Ragno announces the removal of his office to 27 Cleveland Place, New York.

Chicago Happenings

The Annual Stag Picnic of the Chicago Perfumery, Soap & Extract Association took place, June 19th at the White House. Numerous recreational activities were provided by Harold E. Lancaster, Chairman of the Committee, and a large crowd gathered at the Association's last function of the Spring Season. At the regular luncheon on June 5th members were addressed by Leon A. Marks, of the National Salesmen's Training Association. A. G. Schneider, president, who has been ill, returned to preside at this meeting, the last to be held until September. The new membership of George A. Schmidt & Co., represented by F. R. Schmidt, was admitted at this time.

O. N. Davis, president, Chicago Drug and Chemical Association has announced the following committees, appointed for the current year: Entertainment: Chairman, William B. Erb of Kimble Glass Co., O. M. Krembs, of Krembs & Co., and E. P. Gibney, of The Bayer Co.; Finance: W. W. Baldwin, Chairman, of The Baldwin Perfumery Co., M. A. Wallace, of Eli Lilly & Co., and W. H. Clough, of Peter Van Shaak & Sons; Golf: A. C. Drury, Chairman, of A. C. Drury & Co., Inc., Dudley Lum, of Givaudan-Delawanna, Inc., and H. E. Lancaster, of Marshall Field & Co.; Membership: R. A. Whidden, of Bauer & Black, Chairman, H. G. Billmire, of Humiston Keeling & Co., and O. H. Raschke, of Victor Chemical Works. The first Golf Tournament of the year will probably take place the last week in June.

A. S. La Zoris has been appointed Chicago representative for Benj. French, Inc., and has established office at 208 N. Wabash ave.

W. L. Filmer, formerly with Monsanto Chemical Works, has now become associated with Walter H. Jelly & Co.

Sethness Co., formerly at 659 Hobbie st., has moved factory and offices to more commodious quarters at 4640 Belle Plaine ave.

Wm. H. Quade, formerly with the Laboratory Department of Meyer Bros. Drug Co., is now associated with the Dealers' Sales Corp., St. Louis.

Dudley Lum, Chicago Manager of Givaudan-Delawanna, Inc., announces the expected arrival, late in June, of Jaques Riedweg, who has been connected with the European establishment of L. Givaudan et Cie for the past 14 years. M. Riedweg will visit the trade throughout the Midwest territory.

H. J. Halverson, of James S. Kirk & Co., recently became the ecstatic father of a nine-pound boy, who will be known as John Henry Halverson.

Kress & Owen Co., New York, manufacturer of Glyco Thymoline, has started an advertising campaign on a new product, "Glyco Thymoline Toilet Soap." Distribution for the present will be confined to the metropolitan district in which newspapers will be used. Frank Presbrey Co. is directing this advertising.

Eaton-Clark Co., Detroit, manufacturing chemist, has appointed The Van Allen Co. advertising agency of Chicago and Detroit, to direct its advertising account. Business publications will be used.

Marinello Co., New York, of which Harold F. Ritchie & Co., Inc., has acted as sales representative, has organized its own sales staff to sell the products of both the Marinello Co. and of Inecto, Inc.

If you wrap advertising matter around bottles and put them in cartons---

If you polish jars or bottles; label by hand---

If you package pills, powders, or similar products---

---Then give the girls doing this the opportunity to work with greatest facility.

Belt Conveyers provide an orderly arrangement of the work to be done, keep the girls supplied with work and take it out of their way. Belt Conveyers keep production moving, eliminate unnecessary work, lower production costs.

Write for our new catalog giving full information and illustrations of plant installations.

The Karl Kiefer Machine Co.
CINCINNATI, OHIO

THIS illustration shows our facilities for filling capsules. This is a unique service developed by us for *YOU*. This department is as much yours as if in your own laboratory. We do not fill any of our own products, but we do fill millions of capsules every week for our customers.

Send us your material. We'll fill it into Colton Capsules and return the filled capsules to you clean, glistening and full count.

COLTON CAPSULE FILLING DEPARTMENT
(Filling nearly a million a day)

Any quantity of ten thousand or over can be handled economically. The cost: *less than half the cost of hand filling.* The filling: as accurate as any other method and more uniform than most. The loss of material is usually less than 3%. We charge only for the quantity of capsules shipped.

COLTON CAPSULES: are made of the finest gelatine on the only completely automatic machine in the world. These capsule making machines are of our own design and manufacture.

COLTON CAPSULE FILLING MACHINES: are also of our own design and manufacture and are the fastest fillers built.

COLTON CAPSULE FILLING SERVICE: offers an opportunity to you which merits a prompt trial.

ARTHUR COLTON COMPANY
DETROIT, MICHIGAN
Largest producers of empty gelatine capsules and capsule filling machines in the world.

The Financial Markets

Vick Stock Split 2 for 1

Directors of Vick Chemical Co. have proposed a two for one split-up of the capital stock, and an increase in authorized shares from 400,000 to 1,200,000. Stockholders will vote on proposal at special meeting June 13.

Company plans expansion program through development of new products in its own laboratories or by acquisition of other related business.

Vick Financial Corp.

Vick Financial Corp., subsidiary of Vick Chemical Co., has been organized for the purpose of carrying out a financial program approved by the directors.

Capitalization of the new company will consist of 2,000,000 shares of $10 par value common and 200,000 shares of preferred. Of the common, about 200,000 shares will be issued as a bonus and 400,000 shares will be offered to stockholders at $10 a share. It is understood no preferred stock offering will be made at present.

Smith, Kline & French Co. Merges with V. H. Smith & Co.

Smith, Kline & French Co., and Valentine H. Smith & Co., both of Philadelphia have agreed to merge subject to ratification by the stockholders. The plan of operation will become operative on July 1.

The jobbing business of the two companies is to be merged into a company known as Smith, Kline & French, Inc.; and the specialty and manufacturing business of the two companies is to be merged into a company known as Smith, Kline & French Laboratories.

Officers of the new Smith, Kline & French, Inc., are: Chairman of Board, C. Mahlon Kline; President, Walter V. Smith; Vice-president, J. Mahlon Buck; Secretary, Howard E. Smith; Treasurer, J. L. McCurdy.

Officers of the new Smith, Kline & French Laboratories are the same as the officers of the old Smith, Kline & French Co. except that Walter V. Smith has joined the Board of Directors.

Valentine H. Smith & Co. was established in 1830; incorporated in 1890; acquired jobbing business of Robert Shoemaker & Co. in 1928.

Smith, Kline & French Co. was established in 1841; incorporated in 1888; name changed to Smith, Kline & French Co. in 1891.

Monsanto Buys Elko Chemical Co.

Monsanto Chemical Works has acquired Rubber Service Laboratories and its subsidiary, Elko Chemical Co. through an exchange of stock. Directors of Monsanto and Rubber Service have approved the contract, and stockholders ratification takes place June 20.

Rubber Service Laboratories was established in 1922, and manufactures about 20 rubber chemicals. Elko Chemical Co. manufactures many organic chemicals, among which are phenol and phenolphthalein.

Owens Illinois Glass Co. declared an initial quarterly dividend of $1 on common, placing stock on $4 annual basis. The company also declared a dividend of $3 on the new preferred stock, which dividend covers two quarters, dating back to January 1.

Sales companies of Owens Bottle and Illinois Glass have been merged in 26 cities in order to effect economies.

Walgreen Buys Sun Drug

The Walgreen Drug chain have acquired through purchase the eleven Sun Drug Co. stores in Denver at a price involving "in excess of $250,000."

The Walgreen Co. plans an expansion program involving the acquisition of additional stores, a local warehouse and a modern ice cream manufacturing plant.

The Walgreen Co. has expanded until business is expected to total $45,000,000 this year. There are now more than 300 stores from New York to Denver and from Minneapolis to Houston.

Drug Stock Recover

Prices of common stocks of corporations in the drugs, cosmetics and allied lines have staged a comeback from the low point for 1929 reached May 29, as evidenced by the index of the Standard Statistics Co., of New York, which stood at 223.3 on June 6 as compared with a low of 220.2 on May 29.

The following tabulation compares the index of drug stocks in recent weeks with that for 338 stocks of all industries:

June 6	223.3	189.1
May 29	220.2	182.4
May 23	226.7	189.1
May 16	237.1	196.0
May 9	235.7	196.8
1929 High	260.6	198.8
Low	220.2	182.4
1928 High	264.2	186.4
Low	166.8	132.5

First quarter earnings reported by eight important corporations in the drug, cosmetics and allied fields totalled $10, 475,000 against $9,210,000 in the 1928 quarter, a gain of 13.7 per cent.

Stein Cosmetics Buys New Unit

The Stein Cosmetics Co., Inc., announces that it has arranged to purchase all the common stock and assets of the Societe La France Toilet Goods Co., Inc.

Through this acquisition the Stein Co. now controls five units, the others being the M. Stein Cosmetics Co., Alexander Laboratories, Inc., the Synthea Laboratories and Kaya, Inc. Estimates of net earnings for the group for 1929 are set at approximately $190,000, of which about $140,000 would be available for dividends.

Proctor & Gamble Buys Duz Co.

Proctor & Gamble Co. of Cincinnati have acquired the business and assets of the Duz Co. although details of the transaction are still lacking.

Manufacturing activities of Duz will be discontinued here and production transferred to the Proctor & Gamble plant in Cincinnati. The product will retain its present formula and name.

Parke, Davis & Co. declared an extra dividend of 10c and the regular quarterly dividend of 25c, both payable June 29 to stock of record June 18. In the preceding quarter an extra dividend of 10c also was paid.

Coty, Inc., declared the regular quarterly dividend of 50c, payable June 30 to stock of record June 12. The company previously declared a stock dividend of 6% payable in four quarterly instalments of 1½% each during 1929.

Finding the right package for your product

Our business is to find the *one best* way to package your product — and then to supply the machine to do the work in the most economical way.

If you are seeking a more attractive, sales-producing package, get in touch with us.

PACKAGE MACHINERY COMPANY, Springfield, Massachusetts
New York: 30 Church Street **Chicago: 111 W. Washington Street**
London: Baker Perkins, Ltd., Willesden Junction, N. W. 10

PACKAGE MACHINERY COMPANY
Over 150 Million Packages per day are wrapped on our Machines

BISMUTH SUBNITRATE
MERCK

Unusually bulky—a pound is much more than a pint. Excellent in suspensions. White. Odorless. Purity the highest.

MERCK & CO. INC.
MANUFACTURING CHEMISTS
SUCCESSORS TO
POWERS-WEIGHTMAN-ROSENGARTEN CO.
Philadelphia **New York** **RAHWAY, N. J.** **St. Louis** **Montreal**

Van Ameringen-Haebler, Inc. Absorbs Van Ameringen and Morana

Announcement was made on June 1st, 1929 of the consolidation of Morana, Inc., and Van Ameringen, Inc., both being New York corporations engaged in the manufacture of perfume and flavoring materials, aromatic chemicals, and dealing in essential oils.

The business will be conducted under the new corporate title: Van Ameringen-Haebler, Inc., for which incorporation papers have been filed.

The assets, business and good will of the two manufacturers will be taken over by the new corporation in which the chief stockholders will be Arnold L. Van Ameringen, who will be president, and Dr. William T. Haebler, who will be the treasurer.

Blank & Stoller

A. L. Van Ameringen

Both companies will temporarily retain their separate identities and market their products with the names and labels that have carried heretofore. Customers of both the Morana and Van Ameringen companies have been assured by the new officers that there will be no change in formulas, no interruption of manufacturing, and absolute continuity of effort.

The manufacturing laboratories of Van Ameringen, Inc., are located at 451 South Jefferson st. Orange, N. J., where perfume oils, aromatic chemicals and flavoring materials have been manufactured for the perfume and cosmetic trade.

The Morana company which has been a leader for many years in the manufacture of aromatic chemicals, perfume ingredients and fruit flavors, maintains its plant at Elizabeth, N. J. Among the many products handled by the company are the well known Bruno Court flower oils. The company also represents the Haarmann & Reimer aromatic specialties and synthetics. All of these products, as well as the various lines of Van Ameringen will be retained.

To provide additional capital to take care of an expansion program, it is learned that Morana, Inc., is increasing its no par value common stock to 60,000 shares; has authorized a new issue of first preferred stock to the amount of $120,000 and a new bond issue of $300,000. No public financing is contemplated and the new securities will be subscribed for by the present stockholders.

Vice presidents of the Van Ameringen-Haebler, Inc., will be Carl Schaetzer, Arthur Fortune, Frank Croen and Walter Seltmann. The secretary of the parent concern will be Sidney Friend, of Van Ameringen, Inc. The latter's New York offices are located at 30 Irving pl., and those of Morana, Inc., at 61-63 Vandam st.

Directors are John Condon, Frank Croen, P. P. Fallon, Theodore Haebler, William T. Haebler, Frank J. Lynch, August Merz, Henry Pfaltz, Carl Schaetzer, Walter A. Seltmann, Arnold L. Van Ameringen.

Present plans call for the centralization of the two local offices, although the location has not yet been decided upon.

Rhodia Chemical Co. in Merger

Negotiations toward the purchase of Rhodia Chemical Co. by the Newport Chemical Works, are under way for completion June 18. There is no announcement as to the policy of the new ownership of Rhodia, but is understood that the same personnel will continue in charge and that the company will continue in its

A Tip from 3 Men Who've Made Millions

Of Interest to Drug and Toilet Goods Manufacturers Who Want to Make More Money

IF three "big fellows"—men who have made millions in the drug and toilet goods field—asked you to meet a man who helped them and who they think could help *you*, you'd see that man, wouldn't you?

And if you found that this fellow thinks and talks figures, costs, net profits the same as you do—has been on the inside and has in figures the results of every sales plan and advertising slant used by him in the promotion of such big successes as Rubberset Brushes, Houbigant Toiletries, Ironized Yeast, Charles of the Ritz Toiletries, Nuxated Iron, Mary T. Goldman's Hair Dye, and many others—knows jobbers, chain store men and retailers from direct contact with them in frequent swings around the country—doesn't give you a lot of hot air about a "wonderful idea" without knowing whether it has a chance—you'd certainly enjoy meeting him and swapping experiences with him, wouldn't you?

Well, the three men we have mentioned have each written a letter to you introducing this other man. Here are the letters:

Read These Letters

"The writer has been selling through drug stores for twenty odd years, and during this time has had much experience with advertising agencies. We consider Mr. David Steuerman, President of Steuerman Service, one of the most capable, all-around advertising men we have ever come in contact with. Steuerman Service has given us more real service than any agency we have ever had and we recommend them to you unconditionally."

Ironized Yeast Company,
(*signed*) J. G. Dodson, *President.*

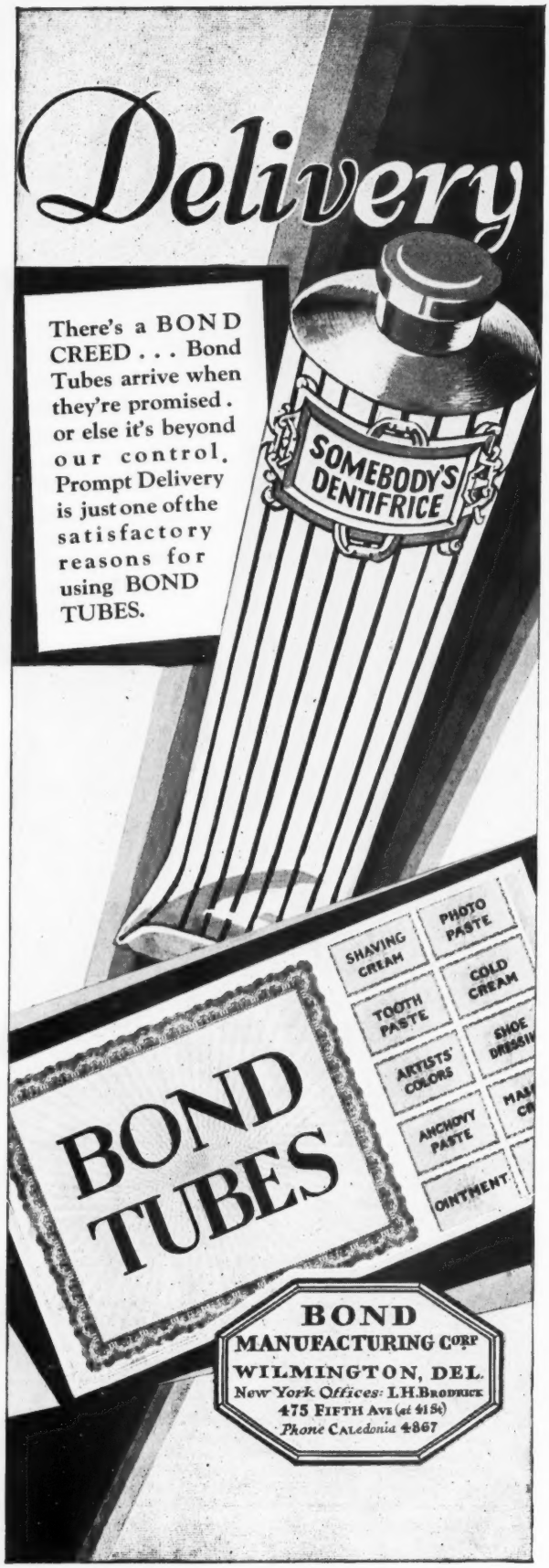
"We have done business with a number of advertising counsellors but find Mr. Steuerman, head of Steuerman Service, to be highly satisfactory."

Cooper & Cooper,
(*Signed*) Harry Cooper, *President.*

"The work Steuerman Service has done for us has been most satisfactory. We like their plans and copy better than any we have had from any other agency."

Rubberset Company,
(*Signed*) A. Albright, Jr., *President.*

If your volume amounts to around $250,000 a year and you would be interested in discussing some of your advertising and merchandising problems with an organization that has guided a number of successes to your *one*, simply write, telephone or call. No obligation of course. Steuerman Service—*Advertising*—15 East 26th Street, New York City.


Delivery
There's a BOND CREED . . . Bond Tubes arrive when they're promised. or else it's beyond our control. Prompt Delivery is just one of the satisfactory reasons for using BOND TUBES.
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New York Offices: L.H. BRODRICK
475 FIFTH AVE (at 41st)
Phone CALedonia 4867

Sales of Lehn & Fink Increasing

Sales of Lehn & Fink Products Co. during the first four months of the year showed an increase of 10% over the like period of 1928, but owing to the increased advertising expenditures, this gain was not all carried over to profits, which, for the period, were only about 3% higher than for the corresponding months of 1928, says "Wall Street Journal."

If the rate of gain in profits is maintained during the last two months of the first half of the year, net for the period would be approximately $1,082,000, against $1,051,000 in the first six months of 1928. However, sales during the first part of May were slightly under those of May, 1928.

Profits for 1928 were sharply ahead of those for 1927. In the first six months of last year, earnings amounted to $1,051,000, compared with $650,564 in the first half of 1927. For all 1928, profits amounted to $1,906,269, the last half of the year contributing $855,269 to the year's total. The last six months of 1927 showed earnings of $626,578.

Capitalization

At the start of 1928, Lehn & Fink had outstanding 295,000 shares of common stock and 150,000 shares of management stock. The latter class of stock carried a privilege of conversion into common stock, share for share, at any time when the earnings for the two preceding years had been equal to $6 a share on the amount of common stock to be outstanding after conversion of the management shares.

Earnings in the first half of 1928 were equal to $3.48 a share on the common stock, after allowing for dividends on the management stock, and were equal to $2.53 a share on the amount of common stock which would have been outstanding after conversion of the management shares.

Management Shares Converted

In view of the gain in earnings, stockholders were asked to waive the requirement for earnings equal to $6 a share on the total stock to be outstanding after conversion, and to permit the conversion of the management shares, in exchange for which privilege the holders of the management shares would accept 120,000 shares of common stock for their 150,000 shares of management stock. This was done in September, 1928.

Since the close of the last fiscal year, Lehn & Fink acquired all of the 500 shares of preferred stock of Lesquendieu, Inc., a French perfumer, in exchange for 4,166 shares of its common stock. In addition to the 500 shares of preferred stock, there are outstanding 250 shares of common stock.

Earned $4.51 a Share in 1928

Earnings for all 1928 were equal to $4.51 a share on the common stock, which is paying dividends at the rate of $3 annually. Thus dividends amount to only 66% of last year's earnings.

During 1928, in addition to the simplification of the capital structure by the elimination of the management stock, notes amounting to $875,000, and due January 1, 1929, were retired. Fixed charges were reduced $52,500 a year by such retirement.

Lehn & Fink stock is selling on the New York Stock Exchange around 53, against the year's low of 51 and the high of 68½.

Northern Warren Co. Reports

The Northam Warren Corp., which recently acquired the assets of the Odorono Co. and the Glazo Co. reports net earnings, for the first quarter, after taxes and all charges, of $157,177. This is equivalent to $3.14 per share on the 50,000 shares of convertible preference stock outstanding which was sold to the public last January, or more than the full year's dividend requirements on the stock. After allowing for the dividend on the preference stock, the balance was equal to 62 cents per share on the 192,500 shares of common stock outstanding, or at the rate of $2.48 per annum.

Lambert Co. declared the regular quarterly dividend of $2.00 payable July 1 to stock of record June 18.

Monsanto Issues Interesting Book

Monsanto Chemical Works have just issued a very attractive booklet entitled "Monsanto, Illinois." This booklet is intended to acquaint the public with a most attractive industrial development by Monsanto Chemical Works. It is situated just outside of the city of East St. Louis, and directly across the Mississippi River from their St. Louis plant.

Monsanto, Ill., offers many attractions as a site for new industries in the way of power, labor, markets, and transportation facilities and the booklet "Monsanto, Illinois" describes in detail the advantages of a location in this development for large industries.

Seeks to Include Tobacco in Food and Drugs Act

An attempt has been made by Senator Reed Smoot (Rep.) of Utah, to have the Food & Drugs Act amended so as to include regulation of the advertising of tobacco products. In a speech on the floor of the Senate, Senator Smoot attacked the forms of advertising by means of the radio, billboards and magazines suggesting that one reach for a certain brand of cigarettes instead of a sweet.

Japan Increases South American Efforts

Activity of the Japanese drug manufacturers to obtain an increased share of the Mexican and South American markets is evidenced by the fact that upon the return to Japan of Eiken Honsho, of the Kokusai Drug Manufacturing Co., from Mexico, two directors of the company, Yuzo Fujii and Heibei Iikura, left for the same country. These men arrived in Mexico, May 2, for a five months' stay. They will return to Japan during October.

Pharmacopoeia Convention Call

In compliance with the provisions of the Constitution and By-Laws of the United States Pharmacopoeial Convention, Reid Hunt, President of the United States Pharmacopoeial Convention of 1930, has issued a call for the Eleventh Decennial Convention to meet in Washington, D. C. on May 13th, 1930.

Boots Pure Drug Co., Ltd., subsidiary of Drug, Inc., reports for year ended March 31, 1929, net profit of £750,152; preference dividends £96,750; reserves £200,000; common dividends £360,000: bonus on common shares £75,000; leaving £18,402 which with balance of £208,307 brought forward from 1928, makes £226,709 carried forward.

John Clarke & Co., Inc., New York, announce that the foreign import agencies and connections for spices, seeds, herbs, and similar products heretofore operated by Messrs. Charles E. Armstrong, Inc., have been taken over by them. Mr. William Archibald, Jr., formerly vice-president of Charles E. Armstrong, Inc., has joined John Clarke & Co., Inc., as vice-president.

Chesebrough Manufacturing Co. declared an extra dividend of 50 cents and regular quarterly dividend of $1, both payable June 29 to stock of record June 8. A similar extra was paid March 30.

Forhan Co. declared regular quarterly dividends of 40c on Class A stock and 25c on common, both payable July 1 to stock of record June 14.

Colgate-Palmolive-Peet Co. show net profit for year ended December 31, 1928, of $6,127,173 after taxes.

MACK

Molded in Color

CAPS

The COLOR *and the* CAPS

A New Principle of Making The SEAL HELP THE SALE

Your bottle or collapsible tube, with a molded cap in striking attractive color, will make a bright spot to catch the public eye.

Bakelite or Durez Caps, in all sizes and beautiful colors, make a distinctive, practical seal.

Our samples will show you a new way to container individuality.

May we mail samples for your inspection?

Mack Molding Company

LITTLE FALLS, NEW JERSEY

"MARIE, dear, you have changed lotions, haven't you? Found something better?" "Not so much better, Ann, but at least I can open and close this bottle. And then it is a bit better looking on my dressing table, don't you think?"

(You might be interested to know that the closure whose convenience and beauty sold a new lotion was an Armstrong's Embossed Top Cork. Manufacturers who are interested in securing its sales assistance are invited to correspond with the Armstrong Cork Company, 913 Arch Street, Lancaster, Pa.)

Armstrong's EMBOSSED TOP Corks

Handy as a Door-Knob

Drug Industry Stocks

1929 May 31st Bid	1929 May 31st Asked	1929 High	1929 Low	1928 High	1928 Low	Sales in May	Sales from Jan. 1,1929 to May 31st	ISSUES	Par $	Shares Listed	An. Rate	Earnings $-per share-$ 1928		1927
								NEW YORK STOCK EXCHANGE						
274	275	305¾	241	252¾	146	58,400	399,700	Allied Chemical	No	2,178,109	$6.00			10.03
134¾	135	151½	107¾	117½	70½	1,578,500	7,373,400	American Can	25	2,473,998	3.00			4.11
137	141	141¾	140	147	136½	3,300	190,00	pfd	100	412,333	7.00			31.66
52½	53½	59¾	46¾	50¾	44	40,900	214,100	American Chicle	No	373,190	2.00	9 mo.	6.48	41.04
...	...	114½	109½	114	107		700	pfd	No	33,200	7.00	9 mo.	42.13	6.78
...	...	11	9	15½	10¾		33,100	American Drug Syn.	10	1,000,000	0.80			0.81
67	68½	85¾	66	86	59	19,200	250,700	American Home Products	No	534,000	3.00	6 mo.	2.52	3.67
55½	68	92½	56¼	83⅛	70½	3,000	35,700	Certo Corp.	No	300,000	3.00	9 mo.	5.19	3.87
13	13¼	23½	12	36	20	19,500	106,800	Container Corp. Class A	20	271,189	1.20	9 mo.	1.46	2.26
6½	7	11¼	6	19¾	9¾	16,700	168,200	Container Corp. Class B	No	568,289	.60	9 mo.	0.73	1.13
68½	68¾	80⅜	60	128⅜	53	195,300	1,798,100	Continental Can	No	*710,000	*5.00	8 mo.	7.61	7.21
124½	128	126	124½	128	123	310	1,220	pfd	100	51,125	7.00	8 mo.	111.39	86.82
88	88½	101¼	68¾	94	64¾	211,800	715,500	Corn Products	25	2,530,000	2.00	9 mo.	3.00	3.50
141⅜	142	144¾	141¼	146½	138½	1,440	7,650	pfd	100	250,000	7.00	9 mo.	35.63	42.40
57	57½	82½	51	89¾	62½	238,200	1,528,100	Coty, Inc	No	†327,762	†2.00	9 mo.	9.23	10.80
105	106	126¼	105	120½	80	100,400	333,500	Drug Incorporated	No	2,183,990	4.00	8 mo.	3.60	11.47
74	74⅜	84⅜	65½	89⅜	65	600,600	1,327,900	Fleischmann	No	4,500,000	‡3.50	9 mo.	3.24	4.30
62	62½	79½	62⅜	84	64½	11,000	58,900	Household Products	No	575,000	‡4.00	6 mo.	2.64	5.22
12⅜	13	23	12⅜	27½	13½	3,000	26,800	Kresge	10	3,678,720	‡1.60	9 mo.	2.76	3.76
69½	71	73½	70	118	110½	720	1,660	pfd	100	20,000	7.00	9 mo.	512.30	698.85
132½	133	157½	127⅛	136¾	79½	173,220	1,665,000	Lambert Co	No	571,906	‡6.50	9 mo.	6.62	6.23
51	52	68½	51	64⅞	38	20,920	222,600	Lehn & Fink	No	295,000	3.00	6 mo.	3.25	4.32
...	...	39¾	29¼	40½	28¾		13,900	Life Savers	No	550,000	1.60	10 mo.	2.10	2.01
49½	50¼	59	49	50¾	45¾	60,200	191,500	McKesson & Robbins, Com	No	664,409	1.60	4 mo.	1.42	0.91
57½	59⅛	62	55	63⅜	54	19,300	69,300	pfd	50	315,086	3.50	4 mo.	4.15	8.94
45¼	46	216¾	42¼	190	117¾	116,600	180,980	Mathieson Alkali	No	147,207	6.00	9 mo.	9.54	10.93
42¼	43½	86¼	67½	71⅛	51½	12,000	109,400	Nat'l Dist. Pfd	No	107,720	.....			0.55
75	79	84	78	95⅛	74¼	5,000	128,200	Owens Bottle	25	768,860	4.00	9 mo.	4.13	5.37
50½	51¼	87½	50	56⅜	47¼	29,200	254,500	Park & Tilford	No	200,000	3.00	9 mo.	5.09	3.70
55¼	56	82¼	55	91	52	240	1,190	Prophylactic Brush	No	100,000	‡4.00	6 mo.	2.47	6.18
...	...	...	...	...	...			Rossville Com'l Alcohol Corp	No	120,000	.....			
20½	20¾	41½	20½	67½	35¾	84,000	793,300	Schulte	No	1,121,667	3.50	6 mo.	1.99	4.90
13¾	14	22¼	13¾	23½	11⅜	10,400	124,600	Sweets Am.	50	100,000	1.00	9 mo.	0.97	0.47
157½	158	173¾	128	138	102¼	120,300	767,600	U. S. Ind Alc.	No	240,000	6.00	6 mo.	3.90	7.26
...	...	127	124¼	125½	118⅝		880	pfd	100	60,000	7.00	6 mo.	19.12	36.03
99	99½	109	82	85	58	64,100	196,300	Vick Chemical Co.	No	400,000	4.00		6.06	5.36
...	...	15	13	25⅜	11⅜			Vivaudou	No	381,573	.....	9 mo.	0.61	2.19
...	...	...	...	100	78			pfd	100	28,578	7.00	9 mo.	13.32	35.42
213	216	232½	192½	225¾	175½	79,200	606,800	Woolworth, F. W.	25	3,900,000	6.00			9.06
72¼	74	80¼	70	84	68	29,700	101,700	Wrigley	No	1,800,000	‡3.50	9 mo.	4.38	5.43
								NEW YORK CURB						
2	3½	7¼	1⅛	21⅞	6½	1,300	8,800	Allison Drug Class A	No	70,000	.....	6 mo.	0.33	7 mo. 2.03
1½	2	5⅜	1	15½	3½	4,800	49,700	Allison Drug Class B	No	95,000	.....	6 mo.		7 mo. 0.89
...	...	...	...	87½	74	28,400	98,400	American Com'l Alc. Corp. V.T.C.	No	77,000	.....	3 mo.	2.66	
29½	30	40⅛	26½	28¼	11⅜	5,300	134,400	Amer. Sol. & Chem. Corp., V.T.C.	No	160,000	.....		1.58	0.17
...	...	...	...	47½	25¾	3,200	68,500	Con. Partic pfd	No	100,000	$3.00		4.00	3.17
87	88½	109½	84½	97½	65	5,100	62,500	Bristol Myers Co. Com.	No	180,000	4.00	6 mo.	3.80	5.82
162	170	...	...	...	...			Ches. Mfg. Co.	25	120,000	.....			8.49
66	67½	80¼	63	92	75	10,900	39,800	Colgate-Palmolive-Peet Com.	No		2.00			
95	98	100	98	...	...	200	300	pfd	No		6.00			
...	...	57¾	25	57¼	56	2,700	23,400	Davis Drug Stores Allot. Ctfs.	No	100,000	.....	7 mo.	6.71	5.02
23½	27½	33¼	24	38¼	23	1,800	10,400	Forhans	No	150,000	1.00		1.89	2.21
...	...	37	19½	23	7½	4,100	12,100	Heyden Chemical Corp.	10	150,000	.....			1.02
...	...	...	...	...	...			May Drug Stores	No	200,000	1.50		1.38	1.82
52¾	56	59¼	55	72	53¾	1,800	20,300	Mead-Johnson	No	165,000	3.00	6 mo.	2.94	6.33
...	...	...	...	98	38½	550	950	Monsanto Chemical	No	110,000	2.50	9 mo.	6.30	6.11
...	...	...	...	28½	10¼	400	2,900	Nauheim Pharmacies Com.	No	90,000	.....			3.03
...	...	...	...	37¾	20½	600	4,800	pfd	No	45,000	2.50			8.56
...	...	58½	44½	55	38	2,900	20,100	Parke Davis & Co.	No	4,747,829	1.00		1.73	1.54
...	...	94	74½	91	48	2,400	33,350	Peoples Drug Store	No	122,250	1.00			3.31
354	360	382	281	300	247	4,750	15,225	Proctor & Gamble	20	1,250,000	8.00		11.96	11.38
85	86	91¾	71¼	102½	37¼	25,200	102,700	Walgreen Co. Com.	No	766,354	.....	9 mo.	2.17	1.59
...	...	...	...	43	26½		23,800	Woodworth, Inc., Com.	No	100,000	1.50	6 mo.	1.04	11 mo. 3.68
32	32½	44¾	31¼	48¾	27	8,400	53,300	Zonite Products Corp.	No	176,000	.....			6 mo. 0.98
								CLEVELAND						
...	...	295	200	112½	25	93	694	Dow Chem. Co.	No	120,000	6.00			
...	...	107½	104¾	107	103¾	62	335	pfd	100	30,000	7.00			
...	...	42	27	30	24	387	10,492	Miller Wholesale Drug Com.	No	17,000	1.60			
...	...	50	24	24	21¼	3,701	10,572	Weinberger Drug, Com.	No	20,000	.....	9 mo.	3.51	1.35
								CHICAGO						
...	...	52	39	...	...	12,800	25,250	Abbott Laboratories	No	120,000	2.00			
...	...	29¼	12	31¾	21½	6,395	64,545	Lane Drug Co., Com.	No	90,000	.....	7 mo.	1.47	3.13
...	...	32	20	31½	23	2,600	31,510	Cum. pfd.	No	65,000	.....	7 mo.	3.20	6.34
								CINCINNATI						
...	...	41½	20¼	...	...	852	2,051	Dow Drug Co.	No	90,000	1.00			
...	...	...	...	...	...			pfd	100	4,000	7.00			
								BALTIMORE						
...	...	...	...	...	...		41	Sharp & Dohme, pfd.	100	10,000	7.00			
								UNLISTED						
71	74	...	...	...	...			Heyden Chemical Corp., pfd.	100	3,100	7.00			56.18
...	...	...	...	...	...			Merck Pfd.	100	33,950	5.00			
...	...	...	...	...	...			Mulford, H. K. & Co.	100	30,154	3.00			
...	...	...	...	...	...			Noxzema Chem. Co.			.....			
...	...	...	...	...	...			Squibb Com.	No	411,778	.....			1.69
...	...	...	...	...	...			pfd	No	63,888	6.00			16.92

*Before giving effect to 100% stock dividend.
†Before giving effect to 300% stock dividend.
‡Includes extras.

Prices Current

Medicinal, Aromatic, and Photographic Chemicals, Crude Drugs, Spices, Essential Oils and Concentrates, Miscellaneous Raw Materials, etc.

Chemical prices quoted are of American manufacturers, spot New York, f. o. b. for immediate shipment, unless otherwise specified.

Products sold f. o. b. works are so specified. Imported chemicals are so designated. Resale stocks, when a market factor, are indicated "second hand."

Crude Drugs and Essential Oils are quoted f. o. b. New York (Manhattan with limitations) for immediate shipment.

The range of price given is not "bid and asked," but are prices of different sellers, based on varying grades and/or quantities. Containers named are original packages most commonly sold.

Acetanilid
Ammonium Valerate

Chemicals

Monthly Review

Alcohol Recovers Firm Position

Alcohol, after its recent gyrations, seems now upon an even keel. On May 1, the new schedule first made its appearance at an increase of 2c per gallon, with a further increase of 1c for June-July deliveries, an additional 1c advance for August deliveries, and 1c additional advance for September-December deliveries, but not more than a week later manufacturers announced the presence in the market of keen competition and reverted to the old schedule. They not only reverted to the old schedule but offered contracts for delivery over the balance of the year, at the lower figures.

The reason behind this break is not entirely clear. One version is that due to the mild winter stocks of anti-freeze alcohol were large and the distillers took this method to stimulate the dealers to take in or contract for their winter supply now. Another version is that price cutting by one of the newly merged companies was being done in order to stimulate sales so as to make effective their stock issue and that other distillers had to compete with these low prices bringing about a general revision to the lower schedule.

The distillers have now stepped back in line, however, the cutting has evidently stopped, the new schedule is again in force, and the market now appears to be in a firm condition.

Just how much business was booked from the time of the break until the reinstatement of the new schedule is problematical but it is reasonable to assume that a goodly number of the larger buyers who are closely in touch with the alcohol situation took advantage of the opportunity and closed contracts for a large part of their requirements for the balance of 1929. The anti-freeze dealers customarily place their contracts at this time of the year and a brisk business was done before the price was again jacked up.

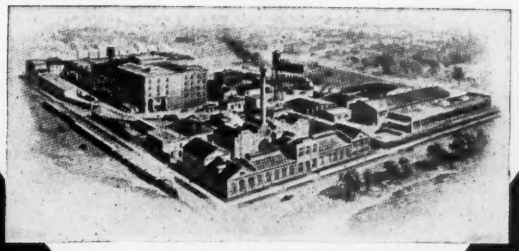
Cod-Liver Appears Strong

In view of the increasing demand, coupled with the interest shown by the medical profession in Norwegian cod-liver oil on account of its high vitamin content, particular attention is now being given to the progress and report of the catch and yield during the current season. As is well understood, the production or yield varies from year to year, and whereas one season may yield a "bumper" production, the following season may bring with it quite an opposite result, hence the constant fluctuation in values year by year.

In the many commodities of general use in the drug trade it would be difficult to find a single article where consumers are so puzzled by market fluctuations as in the purchasing of cod-liver oil. In some seasons prices at the opening are fairly high and decline considerably before the autumn. In other seasons the Norwegians,

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Acetanilid, USP, 200 lb bbls..lb.	.36	.37	.37	.36	.37	.28
Acetone, pure 350 lb drs wks..	.16	.18	.19	.16	.18	.14
Acetphenetidin, 225 lb bbls..lb.	1.25	1.35	1.35	1.25	1.40	1.25
ACID, Acetylsalicylic, 225 lb .....bbls.	.85	.90	.90	.85	.90	.85
Agaric, 1 oz vials .....oz.	.....	3.50	3.50	3.50	3.50	3.50
Arsenous, USP, 220 lb bbls lb.	.....	.18	.18	.18	.18	.18
Benzoic, USP, 100 lb bbls.lb.	.60	.61	.61	.60	.61	.60
Boric, 300 lb bbls.....lb.	.07½	.08	.10½	.07½	.12	.11
Cacodylic, 5 lb. bot.....lb.	.....	8.00	8.00	8.00	8.00	8.00
Camphoric, USP, VIII 1 lb bot.....lb.	4.82	4.82	4.82	4.82	4.82	4.82
Carbolic, USP, crys 112 lb tins.....lb.	.14	.15	.15	.14	.21	.14
Cinnamic, 5 lb cans.....lb.	3.25	3.50	3.50	3.25	3.50	3.25
Citric, USP, crys 230 lb bbl .....lb.	.....	.46	.46	.46	.46	.44½
USP, crys imp. 112 lb keg .....lb.	.59	.61	.61	.59	.61	.55
USP, powd 200 lb bbl...lb.	.....	.47	.47	.47	.47	.45½
Diethylbarbituric, 1 lb bot lb.	.....	4.60	4.60	4.60	4.60	4.60
Gallic, USP, 150 lb bbls..lb.	.....	.74	.74	.74	.74	.74
Glycerophosphoric, 25% 1 lb bot.....lb.	1.40	1.75	1.75	1.40	1.45	1.40
Hydriodic, USP, 10% 5 lb bot.....lb.	.....	.80	.80	.80	.80	.80
Hydrobromic, USP, 40% 155 lb. cbys.....lb.	.....	.55	.55	.55	.55	.55
Hypophosphorous, USP, 30% .....lb. 5 gal demis.....lb.	.....	.85	.85	.85	.85	.85
Lactic, USP, VIII 100 lb cbys lb.....	.56	.62	.62	.56	.62	.56
USP, X 100 lb cbys.....lb.	.62	.64	.64	.62	.64	.62
Phenylcinchonic.....lb.	.....	4.50	4.50	4.50	4.50	4.50
Phosphoric, USP, Syr 70 lb drs.....lb.	.14	.15	.15	.14	.16	.14
Pyrogallic, crys 5 lb cans..lb.	1.40	1.50	1.50	1.40	1.50	1.40
Resublimed, 5 lb cans...lb.	1.80	1.85	1.85	1.80	1.85	1.80
Salicylic, USP, 100 lb bbls.lb.	.....	.40	.40	.40	.41	.40
Succinic, 100 lb bbls.....lb.	.....	1.35	1.35	1.35	1.35	1.35
Sulfurous, USP, 6% 100 lb cbys.....lb.	.05	.06	.06	.05	.06	.05
Tannic, USP, fluffy 50 lb bbls. .....lb.	.87	.93	.93	.87	.93	.87
Powd 200 lb bbls.....lb.	.80	.85	.85	.80	.85	.80
Tartaric, USP, 300 lb bbls.lb	.....	.38	.38	.38	.38	.35
Aconitine, Alk, crys 1 oz vials .....oz.	.....	30.00	30.00	30.00	30.00	30.00
Amorphous, 1 oz vials....oz.	.....	20.00	20.00	20.00	20.00	20.00
Adeps Lanae, hyd 350 lb bbls lb.	.15	.16	.16	.15	.16	.15
Anhydrous, 350 lb bbls....lb.	.16	.18	.18	.16	.19	.16
Agaricin, 1 oz vis incl.....oz.	.....	2.32	2.32	2.32	2.32	2.32
ALCOHOL, Benzyl, 5 lb bot lb.	1.25	1.35	1.35	1.25	1.55	1.25
Ethyl, USP, 190 pf 50 gal bbls.....gal.	2.69½	2.79½	2.79½	2.69½	2.79½	2.66½
Pure tax free.....gal.	.61	.69	.69	.61	.77	.54
Grain drums.....gal.	2.69	2.79	2.79	2.69	4.00	2.67
Denatured, drums add 7c for bbls.....						
No. 1 spec.....gal.	.49	.57	.57	.47	.55	.43
1 comp.....gal.	.50	.58	.58	.48	.56	.44
No. 5 comp.....gal.	.49	.57	.57	.47	.56	.44
23 a, spec.....gal.	.50½	.58½	.58½	.48½	.68	.43½
39 b, spec.....gal.	.53	.62	.71	.62	.71	.56
40 m. spec .....gal.	.48½	.56½	.66½	.56½	.66½	.51½
Isopropyl refd 98.99% drs .....gal.	1.25	1.50	1.50	1.25	1.50	1.25
Phenylethyl, 1 lb bot.....lb.	8.00	10.00	10.00	8.00	10.00	8.00
Aloin, USP, 100 lb cases....lb.	1.65	1.70	1.70	1.25	1.30	.90
Aluminum Acetotartrate kegs .....lb.	....	1.60	1.60	1.60	1.60	1.60
Amidipyrine, 10 lb boxes....lb.	4.25	4.45	4.45	4.25	4.75	4.25
AMMONIUM, Acetate 100 lb kegs.....lb.	.38	.40	.40	.30	.38	.34
Benzoate, USP, 1 lb bot...lb.	.....	1.27	1.27	1.27	1.27	1.27
Borate, 10 lb bot.....lb.	.....	.35	.35	.35	.35	.35
Bromide, USP, 450 lb bbls.lb.	.48	.50	.50	.48	.50	.48
Imported, 112 lb boxes..lb.	.48	.50	.50	.48	.50	.48
Carb, USP, lump 100 lb kegs .....lb.	.....	.13½	.13½	.13½	.13½	.13½
USP, powd 100 lb kegs..lb.	.....	.14½	.14½	.14½	.14½	.14½
Citrate, 100 lb kegs.....lb.	.85	.90	.90	.85	.90	.85
Ichthyolate, as to brand..lb.	4.00	4.50	4.50	4.00	4.50	4.00
Iodide, USP, 25 lb jars...lb.	.....	5.20	5.20	5.20	5.20	5.20
Phosphate, dibasic 250 lb bbls .....lb.	.48	.50	.50	.43	.48	.43
Salicylate, USP, 100 lb kegs .....lb.	1.15	1.20	1.20	1.15	1.20	1.15
Valerate, USP, 25 lb jars...lb.	2.75	2.90	2.90	2.75	2.90	2.75

FINE HEYDEN CHEMICALS



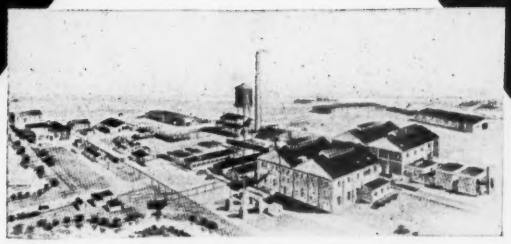
GARFIELD, N. J., PLANT

Benzoate of Soda **Benzoic Acid**

METHYL SALICYLATE
(Oil of Wintergreen, Synth.)

Benzaldehyde **Benzyl Chloride**

Our Products Meet the Most Exacting Requirements.



PERTH AMBOY, N. J., PLANT

HEYDEN CHEMICAL CORP.
45 E. 17TH STREET NEW YORK
180 N. WACKER DRIVE CHICAGO

Monthly Review

anticipating a heavy production, commence selling at very low prices and frequently find themselves severely "caught," as the later fishing, being very poor, has resulted in much higher prices.

The production last season, viz. 50,981 hectolitres, was the lowest experienced for at least the past decade, outside the war period, and, consequently, the "carry over" of old oil from last year was much below the average. This season the production has been distinctly favorable, especially during the opening weeks of the fishing, and prices fell heavily, at one time dropping to 92s. 6d. per barrel, c. i. f. This was only a temporary decline, as with the fishing less productive during the past few weeks, there has been a considerable improvement, with the result that at one time quotations from some of the leading manufacturers rose to 112s. 6d. per barrel.

From various observations it would appear that there is a marked difference of opinion this season between several of the Norwegian manufacturers, since it will be found that at some periods there has been as much as 10 per cent. difference in prices between the makers. At other periods, while certain makers have been ready sellers, others of equal importance have given their representatives definite instructions to refrain from offering, which clearly illustrates the divergence of market opinions.

The following table has been specially compiled and gives some interesting figures showing the total output of cod liver oil in Norway since the year 1906, together with the approximate values ruling during this period:

Date	Hectolitres cod-liver oil	Prices C. I. F. London
		s. s.
June, 1906	42,908	60 to 76 per barrel
" 1907	46,889	65 " 86 " "
" 1908	59,104	56 " 75 " "
" 1909	50,460	61 " 78 " "
" 1910	41,024	75 " 105 " "
" 1911	43,318	105 " 150 " "
" 1912	76,202	58 " 90 " "
" 1913	48,263	80 " 115 " "
" 1914	57,171	62 " 90 " "
" 1915	52,238	110 " 300 " "
" 1916	60,000	no reliable figures
" 1917	37,100	available
" 1918	20,500	
" 1919	37,600	410 to 450 per barrel
" 1920	58,951	275 " 425 " "
" 1921	56,621	80 " 175 " "
" 1922	78,259	85 " 108 " "
" 1923	81,023	85 " 108 " "
" 1924	111,748	85 " 120 " "
" 1925	90,950	105 " 170 " "
" 1926	120,954	100 " 140 " "
" 1927	71,997	117 " 180 " "
" 1928	50,981	140 " 170 " "
To May 1919	81,499	92s. 6d. to 130s "

For the purposes of calculation it should be noted that a 25 gallon barrel is equal to 1.16 hectolitres, and that the above figures represent crude medicinal oil, about 10 per cent. being lost in the refining process. From the above figures it will be noted that whilst the production to date is considerably in excess of last year's figures, it bears fair comparison with the seasons of 1924-1926, when generally speaking much higher prices were secured. The increase in the world's consumption has been very noticeable in recent years, whilst an important and increasing outlet is the strong demand for cattle and poultry-feeding purposes. Although the United States has in recent years used large quantities for veterinary purposes, we find that in this country the leading authorities are strongly recommending this quality for all classes of live stock, with the result that there is an increasing demand from all quarters. There is practically no demand nowadays for the old sherry-coloured oil, and the quality mostly sold is the clear pale oil.

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Amylene Hydrate, 1 lb bot..lb.	.....	7.10	7.10	7.10	7.10
Antipyrine, USP, 100 lb cans.lb.	1.80	1.82	1.82	1.53	1.75	1.53
Apomorphine Hydrochloride, ¼ oz. vials.....oz.	22.60	22.70	22.70	22.60	35.80	22.60
Arecoline Hydrobrom, 1 oz vials .....oz.	7.75	8.75	8.75	7.75	11.45	7.75
Aspidospermine Amorphous..oz.	.....	15.00	15.00	15.00	15.00	15.00
Atropine Alk, USP, 1 oz. vials .....oz.	7.00	9.10	9.10	7.00	9.10	9.10
Methyl bromide, 1 oz vials.oz.	.....	25.00	25.00	25.00	25.00	25.00
Sulfate, 5 oz cans.....oz.	.....	3.00	3.00	3.00	3.00	3.00
Single ounce.....oz.	.....	3.15	3.15	3.15	3.15	3.15
Barium Iodide, 5 lb box.....lb.	.....	5.15	5.15	5.15	5.15	5.15
Sulfate, X-ray diagn bbls..lb.	.09½	.10	.10	.09½	.10	.09½
BAY RUM Porto Rico, 45 gal. bbls.....gal.	.85	.90	.90	.85	.90	.80
Domestic syn. 50 gal bbl..gal.	.70	.75	.75	.70	.75	.65
St. Thomas, 50 gal bbls...gal.	.80	.90	.90	.80	.90	.80
Benzonaphthol, 5 lb boxes...lb.	2.50	2.60	2.60	2.50	2.60	2.50
Benzoyl Cholride, 500 lb dr..lb.	.....	1.00	1.00	1.00	1.00	1.00
Benzyl Benzoate, Medicinal FFC.....lb.	.....	1.40	1.40	1.40	1.40	1.40
Chloride Redis, 160 lb cby.lb.	.30	.35	.35	.30	.35	.30
Formate, 1 lb bot.....lb.	3.25	3.50	3.50	3.25	3.50	3.25
Succinate, 160 lb cby.....lb.	.....	5.25	5.25	5.25	5.25	5.25
BISMUTH, metal 100 lb cases .....lb.	.....	1.70	1.70	1.70	2.25	1.70
Ammon. Citrate, USP, 5 lb cans.....lb.	.....	5.50	5.50	5.50	5.65	5.50
Betanaphtholate, 5 lb box.lb.	.....	3.10	3.10	3.10	3.35	3.10
Citrate, USP, 5 lb cans....lb.	.....	2.75	2.75	2.75	2.95	2.75
Chloride.....lb.	.....	3.15	3.15	3.15	3.40	3.15
Hydroxide.....lb.	.....	3.05	3.05	3.05	3.30	3.05
Nitrate, 25 lb jars.....lb.	.....	1.80	1.80	1.80	1.95	1.80
Oxide anhydrous.....lb.	.....	3.40	3.40	3.40	3.70	3.40
Oxychloride, 25 lb boxes...lb.	.....	3.10	3.10	3.10	3.35	3.10
Salicylate, 25 lb boxes.....lb.	.....	1.80	1.80	1.80	1.95	1.80
Subcarbonate, USP, 25 lb boxes.....lb.	.....	2.20	2.20	2.20	2.70	2.20
Subcarbonate, X-ray diag 1 lb. bot.....lb.	.....	3.45	3.45	3.45	3.65	3.40
Subgallate, USP, 25 lb boxes .....lb.	.....	2.50	2.50	2.50	2.70	2.50
Subiodide, 5 lb lots.....lb.	.....	4.25	4.25	4.25	4.40	4.20
Subnitrate, USP, 25 lb jar.lb.	1.60	1.65	1.65	1.60	2.30	1.60
Subsalicylate, USP, 25 lb boxes.....lb.	.....	2.90	2.90	2.90	3.15	2.90
Tannate.....lb.	.....	2.65	2.65	2.65	2.65	2.45
Borax, crys USP, 400 lb bbls.lb.	.....	.03½	.03½	.03½	.05	.03½
Bromoform, USP, 5 lb bot cases .....lb.	1.65	1.90	1.90	1.65	1.90	1.65
Butylchloral Hydrate bot....lb.	4.00	5.00	5.00	4.00	5.00	4.00
Cadmium iodide, 10 lb bot...lb.	.....	4.55	4.55	4.45	4.55	4.45
CAFFEINE Alk, USP, 1..... 100 lb kegs.....lb.	2.90	2.95	2.95	2.90	3.20	2.80
Citrated, 50 lb cans.....lb.	2.35	2.60	2.60	2.00	2.25	2.00
Hydrobromide, 1 lb bot...lb.	4.80	5.00	5.00	4.80	5.00	4.65
Hydrochloride, 1 lb bot...lb	6.05	6.55	6.55	6.05	6.55	6.05
Sulfate, 1 lb bot.....lb.	5.40	5.90	5.90	5.40	5.90	5.40
Sodium Benzoate, tins....lb.	.....	3.05	3.05	3.05	3.05	3.05
Salicylate, tins.....lb.	.....	2.95	2.95	2.95	2.95	2.95
Calcium Bromide, 100 lb cs..lb.	.....	.60	.60	.60	.60	.60
Carb, USP, 175 lb bbls....lb.	.04½	.06½	.06½	.04½	.06½	.04½
Glycerophos, 250 lb bbls...lb.	.....	1.40	1.40	1.40	1.40	1.40
Hypophos, USP, 25 lb cans lb.	.60	.65	.65	.60	.65	.60
Iodide, 5 lb bot.....lb.	.....	4.35	4.35	4.35	4.35	4.35
Lactate, USP, 500 lb bbls lb.	.45	.50	.50	.45	.50	.45
Lactophosphate Soluble...lb.	.....	1.20	1.20	1.20	1.20	1.20
Powdered tins.....lb	.....	1.00	1.00	1.00	1.00	1.00
Insol, powd tins.....lb.	.....	.50	.50	.50	.50	50
Sulfide, USP, 100 lb drs...lb.	.21½	.24	.24	.21½	.25	20
CAMPHOR, Jap. ref. slabs 100 lb. cases.....lb.	.59½	.60	.60	.59½	.66	.57
Refined powd.....lb.	.63	.64	.64	.63	.70	.62
½ oz tab, 100 lb cases....lb.	.75	.76	.76	.73	.75	.68
Liniment, bbls.....gal.	2.20	2.30	2.30	2.20	2.30	2.20
Monobrom, 100 lb cases...lb.	1.85	1.90	1.90	1.85	1.90	1.85
Casein edible, 100 lb kegs...lb	.45	.55	.55	.45	.55	.45
Castor Oil, odorless, 200 gl. bbls. lb.	.14½	.....	.....	.....	.....	.....
Chalk drop, 175 lb bbls.....lb.	.....	.03½	.03½	.03½	.03½	.03½
Precip light, 250 lb csk....lb.	.....	.04½	.04½	.04½	.04½	.04½
Heavy 540 lb csks.....lb.	.02½	.03½	.03½	.02½	.03½	.02½
Bulk.....ton	.....	5.00	5.00	5.00	5.00	5.00
English, 7 lb bags.....lb.	.....	.08½	.08½	.08½	.08½	.08½
Charcoal Animal medicinal jars incl.....lb.	.....	.50	.50	.50	.50	.50
Charcoal Wood, powd, 100 lb. bbls.....lb.	.05½	.06	.06	.05½	.06	.05½
Chloroform, USP, 50 lb drs...lb.	.....	.27	.30	.27	.30	.28
Chloral Hydrate, USP, 25 lb jars.....lb.	.60	.65	.80	.75	.80	.70
100 lb drums.....lb.	.55	.60	.75	.70	.75	.65
Cholesterin.....oz.	5.50	5.85	5.85	5.50	5.85	4.00
Chromium Sulfate Scales, tins .....lb.	.55	.60	.60	.55	.60	.55
Powdered tins.....lb.	.60	.65	.65	.60	.65	.60
Chrysarobin, 50 lb tins.....lb.	3.75	4.10	4.25	3.75	4.25	3.65
Cinchonine Alk, 100 oz tins.oz.	.....	.38	.38	.38	.38	.38
Crystal.....oz.	.43	.46	.68	.65	.68	.65
Sulfate, 100 oz tins.....oz.	.....	.25	.25	.25	.25	.25
Cinchonidin Sulfate, 100 oz tins .....oz.	.35	.35	.35	.35	.35	.35
Cocaine Alk, USP, 1 oz vial..oz.	.....	11.07	11.07	11.07	11.07	11.07
Hydrochloride, USP.....oz.	.....	8.50	8.50	8.50	8.50	8.50
Cocoa Butter, 12 lb boxes...lb.	.42	.45	.45	.42	.50	.40

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Digitalin Pure
Eserine Sulphate
Brucine Sulphate
Brucine Alkaloid
Codeine Sulphate
Atropine Alkaloid
Guaiacol Benzoate
Aconitine and Salts
Veratrine Alkaloid
Codeine Phosphate
Duboisine Sulphate
Pilocarpine Nitrate
Hydrastine Sulphate
Acid Diethylbarbituric
Colchicine Amorphous
Berberine Sulphate Acid
Arecoline Hydrobromine
Veratrine Hydrochloride
Hydrastine Hydrochloride
Berberine Sulphate Neutral
Strychnine Sulphate Crystal
Strychnine Alkaloid Crystal
Strychnine Alkaloid Powder
Homatropine Hydrobromide
Hyoscymine Alkaloid Crystals
Potassium Guaiacol Sulphonate

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Morphine Sulphate
Guaiacol Carbonate
Hydrastine Alkaloid
Cocaine Hydrochloride
Emetine Hydrochloride
Hyoscine Hydrobromide
Berberine Hydrochloride
Yohimbin Hydrochloride
Pilocarpine Hydrochloride
Hyoscymine Hydrobromide
Hydrastinine Hydrochloride
Strychnine Sulphate Powder
Apomorphine Hydrochloride
Hyoscymine Sulphate Crystals
Ethylmorphine Hydrochloride

THE HOFFMANN LAROCHE CHEMICAL WORKS, INC.

17-19-21 CLIFF STREET, NEW YORK, N. Y.

{ Monthly Review }

In recent years a certain amount of propaganda has been put forward in regard to both Newfoundland and the Scottish cod liver oil. In the case of Newfoundland oil very little is imported into this country, the bulk of the supplies being exported to the United States. As several of the leading manufacturers are more or less financed by the American houses, the price for this surplus Newfoundland oil is generally on a very high scale, hence the lack of interest shown on this market. In regard to the Scottish cod liver oil, although the vitamin content is claimed to be high, the flavour, colour, as well as general appearance, are factors that do not make it a serious competitor to the Lofoten oil, which still holds its previous high reputation as regards quality.

Regarding the future prospects of the market, it is always a matter of extreme difficulty to venture an opinion, as with such a world wide market there are so many factors to take into consideration. The fact remains that cod-liver oil in the neighbourhood of 100s. per barrel is decidedly in consumers' favour, and one has to go back to five years ago, viz., 1924, before finding lower prices. The Lofoten fishing has undoubtedly been prolific, especially in the opening weeks, but the subsequent production has not been nearly so heavy. Furthermore, the Finnmarken fishing, which for the last two years has been little short of a complete failure, has not opened too favourably, and is not likely to be nearly so productive as the Lofoten fishing, as witnessed by the results at present coming to hand. Should the Finnmarken fishing not improve, it is fairly certain that prices will be fully maintained in the near future.

Another important factor that buyers should take into consideration is that the possibility of a sharp break in prices is rather remote, inasmuch as the industrial oil consumers would readily absorb any surplus that would be available, for use in the manufacture of margarine, etc. In the case of margarine, the vitamin question is now attracting considerable attention, and if the large manufacturers were able to purchase crude cod-liver oil in large quantities at a reasonable low figure (as they have previously done) a decided preference would be shown by these makers to cod-liver oil against other industrial oils, where the vitamin content is known to be infinitesimal.

It appears fairly certain that consumers, both in this country as well as abroad, have covered only a small proportion of their requirements, in the hope that lower prices will rule in the near future. For this reason, and the fact, that present prices are barely a paying proposition for the Norwegian manufacturers, there is little justification for anticipating much lower prices.

"Chemist and Druggist."

Glycerine remains unchanged in price and business is still being taken at 14½c per lb. Trading is along quiet channels but due to a lack of definite selling pressure present prices are being maintained without difficulty.

Cinchona Imports Greater

As will be noted from the following table, there was an increase in both quantity and value of crude drug imports into the United States during the first four months of 1928 and 1929:

	Current Market	1929 High	1929 Low	1928 High	1928 Low
CODEINE Alk, 1 oz vials, 10 lots....oz.	.....	10.37	10.37	10.37	10.87	10.37
Hydrobromide....oz.	.....	7.42	7.42	7.42	7.92	7.42
Hydrochloride....oz.	.....	9.37	9.37	9.37	9.87	9.37
Nitrate, oz vl 10 oz lots....oz.	.....	8.30	8.30	8.30	8.80	8.30
Phosp. oz vl, 10 oz lots....oz.	.....	7.92	7.92	7.92	8.42	7.92
Salicylate....oz.	.....	6.75	6.75	6.75	7.25	6.75
Sulfate, oz vl, 10 oz lots...oz.	.....	8.42	8.42	8.42	8.92	8.42
COD LIVER OIL Nor., 30 gal bbls....bbl.	29.00	30.00	36.00	22.00	48.00	38.00
Newfoundland....bbl.	.....	46.00	46.00	46.00	46.00	46.00
Colchicino Alk, USP, 1 oz vl..oz.	.....	20.00	20.00	20.00	20.00	20.00
Salicylate, 1 oz vls....oz.	.....	35.50	35.50	35.50	35.50	35.50
Collodion, USP, 30 lb drs....lb.	.....	.23	.23	.23	.23	.23
Corn Syrup, 42 deg. 50 gal bbls. 100 lb.	3.91	4.16	4.16	3.91	4.51	3.31
Cream Tartar, USP, 300 lb bbls ....lb.	.26½	.26¾	.28	.26½	.28	.26
Imp. powd. 224 lb bbls....lb.	.25¼	.25½	.27	.25½	.27¼	.25¼
Creosote, USP, 42 lb cbys....lb.	.40	.42	.42	.40	.42	.40
Carbonate, 150 lb. ....lb.	1.50	1.60	1.60	1.50	1.60	1.50
Cresol, USP, 400 lb drums...lb.	.....	.20	.20	.20	.20	.20
500 lb drums....lb.	.....	.20	.20	.20	.20	.20
DIGITALIN Pure, 1 oz vial..oz.	15.00	15.50	15.50	15.00	15.50	15.00
Dover's Powder, USP, 5 lb tin ....lb.	2.45	2.50	2.50	2.45	2.50	2.45
Duboisine Sulfate, 1 oz vl....oz.	.....	30.07	30.07	30.07	30.07	30.07
Emetine Alk, 15 gr vial....oz.	.....	.85	.85	.85	.85	.85
Hydrochloride, USP, 1 oz vl ....oz.	35.00	36.00	36.00	35.00	36.00	35.00
15 grain vials....oz.	2.50	2.70	2.70	2.50	2.70	2.50
Epsom Salts, USP, 200 lb bbls ....100 lb.	2.25	2.50	2.50	2.25	2.50	1.85
Imp. 100 lb bbls....100 lb.	1.95	2.00	2.00	1.95	2.00	1.95
Ergotin Bonjean, 1 lb jars...lb.	18.50	19.00	19.00	18.50	21.00	15.25
Eserine Alk, 1 oz vials....oz.	.....	50.00	50.00	50.00	40.00	40.00
Salicylate, 1 oz vials....oz.	.....	40.00	40.00	40.00	40.00	40.00
Sulfate, USP, VIII 1 oz vials ....oz.	.....	40.00	40.00	40.00	40.00	40.00
ETHER, USP, 55 lb drums..lb.	.....	.18	.18	.18	.16	.15
Anaesthesia, 55 lb drums..lb.	.....	.23	.23	.23	.21	.20
Nitrous, 1 lb bot....lb.	.....	.80	.98	.80	.95	.95
Ethyl Chloride, 200 lb bot...lb.	.22	.24	.24	.22	.25	.22
Ethyl Iodide, 5 lb bot....lb.	.....	6.25	6.25	6.25	6.25	6.25
Formaldehyde, USP, 100 lb cbys lc-l wks....lb.	.10½	.10¾	.10¾	.09¾	.10	.07¾
Gall Extract....lb.	.20	.21	.21	.20	.21	.20
Gelatin, USP, Silver, 100 lb cs ....lb.	.55	.60	.60	.55	.60	.55
Pure Food, 50 lb bbls....lb.	.53	.55	.55	.53	.55	.53
GLANDULAR SUBSTANCES						
Duodenal Substance, 1 lb lots	.....	5.50	.....	.....	.....	.....
Liver Substance (Hepatic) 1 lb lots....	.....	4.50	.....	.....	.....	.....
Orchic Substance (Testicular)	.....	4.75	.....	.....	.....	.....
Ovarian Substance, whole, 1 lb lots....	.....	26.00	.....	.....	.....	.....
Ovarian Residue, 1 lb lots....	.....	20.00	.....	.....	.....	.....
Pituitary Substance, whole 1 lb lots....	.....	40.00	.....	.....	.....	.....
Pituitary Substance, Anterior Lobe, 1 lb lots....	.....	27.00	.....	.....	.....	.....
Thyroid, U. S. P., 1 lb lots...	.....	4.75	.....	.....	.....	.....
Oxgall Powder, 1 lb lots....	.....	1.35	.....	.....	.....	.....
Glucose, (grape sugar) dry 70° bags c-l NY....100 lb.	3.14	3.24	3.24	3.14	3.24	3.14
GLYCERIN, CP, 550 lb drums ....lb.	.14½	.15	.15½	.14½	.19	.15
Gold Chloride, bottles....oz.	12.00	12.50	12.50	12.00	12.50	12.00
Guaiacol, liq. USP. 100 lb cbys....lb.	1.65	1.75	1.75	1.65	2.25	1.75
Crystals....lb.	2.25	2.50	2.50	2.25	2.50	2.25
Benzoate, 1 lb bottles....lb.	.....	13.00	13.00	13.00	3.00	13.00
Carbonate, 5 lb boxes....lb.	1.70	2.50	2.50	1.70	2.50	1.70
Haarlem Oil, bot 6 gr cases...gr.	.....	3.25	3.25	3.25	3.25	3.25
Imported, 5 gross cases....gr.	.....	3.50	3.50	3.50	3.50	3.50
Halazone, 5 lb bot....lb.	2.75	3.25	3.25	2.75	3.25	2.75
Hexamethylenetetramine, USP, 100 lb dr....lb.	.48	.54½	.62½	.48	.62½	.52
Homatropine Hydrobrom USP. ....oz.	.....	14.50	14.50	14.50	14.50	14.50
5 oz and 1 oz vials....oz.		13.50	13.50	13.50	13.50	13.50
Hydrastine Alk, USP, 1 oz vial ....oz.	20.50	21.00	21.00	20.50	21.00	20.50
Hydrochlide, USP, 1 oz vials ....oz.	20.50	21.00	21.00	20.50	21.00	20.50
Sulfate, 1 oz vial....oz.	22.50	23.00	23.00	22.50	23.00	22.50
Hydrastinine Hydrochloride, USP, 15 gr vials....oz.	.....	40.00	40.00	40.00	40.00	40.00
Hydrogen Peroxide, USP, soln 375 lb bbls....lb.	.03½	.04½	.04½	.03½	.05	.03½
Hyoscine Hydrobrom, USP, 1 oz vials....oz.	.....	13.57	13.57	13.57	13.57	13.57
5 oz, 1 oz vials....oz.	13.07	13.57	13.57	13.57	13.57	13.07
Hyoscyamine Alk, crystals, 1 oz vials....oz.	.....	25.07	25.07	25.07	25.07	25.07
Amorphous, 1 oz vial...oz.	.....	75.07	75.07	75.07	75.07	75.07
Hydrobromide, USP, 1 oz vial ....oz.	.....	35.07	35.07	35.07	35.07	35.07
Sulfate, 1 oz vial....oz.	.....	25.07	25.07	25.07	25.07	25.07
Hypoquinone, 100 lb kegs...lb.	.....	1.25	1.25	1.25	1.25	1.25
ICHTHYOL, tins....lb.	4.00	4.25	4.25	4.00	4.25	4.00
Iodide Arsenous, 5 lb bot...lb.	.....	5.20	5.20	5.20	5.20	5.20
Arsenous-Mercuric soln, 5 lb bot....lb.	.....	.26	.26	.26	.26	.26

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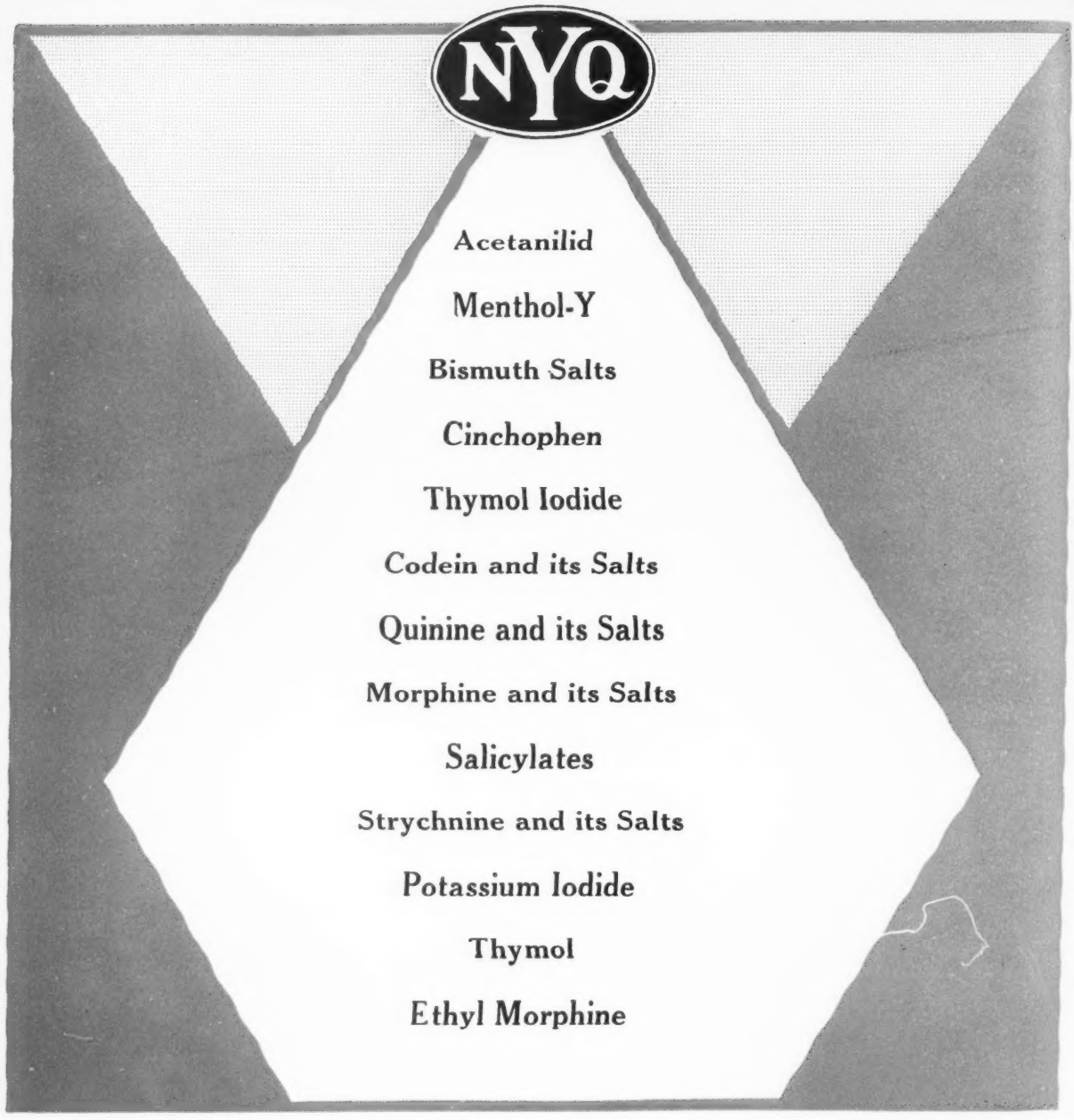

New York Quinine and Chemical Works

INCORPORATED

99-117 No. 11th Street

BROOKLYN, NEW YORK

ST. LOUIS DEPOT
304 S. FOURTH STREET

{ Monthly Review }

	Jan.-April 1928 Pounds	Jan.-April 1928 Value	Jan.-April 1929 Pounds	Jan.-April 1929 Value
Cinchona bark or other from which quinine may be extracted	534,673	$ 139,034	1,153,926	$ 297,796
Pyrethrum or insecticide flowers	6,089,525	1,457,914	3,274,402	929,272
Licorice root	17,659,041	467 545	28,608,407	738,971
Licorice extract	427,182	78,726	101,978	22,262
Opium, crude, 8.5 per cent. or more morphia	37,151	257,595	79,571	417,332
Senna	898,079	53,628	605,562	51,259
All other	8,913,903	1,321,772	9,144,902	1,447,761
Total	34,559,554	$3,776,214	43,058,748	$3,904,653

Iodine from Seaweed in Norway

Iodine from seaweed. From Commercial Attache Marquard H. Lund, Oslo, Norway, comes information that a reliable source reports that efforts are being made to organize a new company for the manufacture of iodine from seaweed. The factory is to be located on the west coast of Norway where seaweed is found in sufficiently large quantities to make the gathering profitable. It is now being done on a small scale. However, at present the iodine content ash obtained from burning the weed is being shipped to England for conversion into the finished product. The object of the promoters of the new company is to encourage the gathering of the raw material in larger quantities than is being done now.

Exports of copper iodide from Java reached a new peak of approximately 149 metric tons during 1928, with an iodine content of 99.3 metric tons. All iodine produced in Java is extracted as crude copper iodide and shipped in this form. Exports of iodide and copper iodide during the period 1921-1928 are shown in the following table:

	Iodine	Copper Iodide (Iodine Content)		Total Iodine Exported	
	Metric Tons	Total	Metric Tons	Metric Tons	Equiv. in lbs.
1921	20	62	41	62	136,700
1922	25	46	31	56	123,500
1923	19	31	21	40	88,200
1924	—	90	60	60	132,300
1925	—	112	75	75	165,300
1926	—	134	89	90	198,400
1927	—	131	87	87	191,800
1928	—	169	99	99	218,295

Most of the copper iodide produced is shipped to Great Britain; the Netherlands and Germany account for the remainder.

On the other hand, exports of Iodine from Chile have decreased. Imports and exports of iodine from Antofagasta, Chile, during 1928, amounted to 368 metric tons, as compared with 381 tons in 1927. Normally from 40 to 50 per cent of Chile's iodine exports clear through this port. Since this industry is completely controlled by the Iodine Producers' Association, an even more perfect monopoly than its counter-part, the Nitrate Producers' Association, such slight variations have little importance.

During the early part of 1929, the Chilean Iodine Association held a number of meetings at which it was decided that on account of the large stocks of iodine held in Europe and because of other considerations, a new contract should be made with Messrs. Gills & Co., allowing them to continue as European sales agents but with a reduced commission. It has been recently stated that the Anglo-Chilean Consolidated Nitrate Corporation will sell its own products in the United States after July 1. Imports of iodine into the United States during 1927 and 1928 were 926,000 pounds, valued at $2,901,000 and 721,000 pounds valued at $2,429,006.

The members of the Chilean Iodine Producers Association produced a total of 998,862 kilos of iodine during 1928 and exported 789,801 kilos. The price turned over

	Current Market		1929 High	1929 Low	1928 High	1928 Low
Iodine, crude, 200 lb kegs	lb.	4.35	4.35	4.35	4.20	3.88
Resublimed, 10 lb tars	lb.	4.65	4.70	4.65	4.70	4.65
Tincture demis	gal.	4.70	4.70	4.65	4.65	4.55
Iodoform, powd 10 lb bot	lb.	.....	6.00	6.00	6.00	6.00
Iron & Ammonium Citrate, USP, 50 lb cans	lb.	.65	.66	.66	.64	.66	.64
Chloride, USP, lump 400 lb bbls	lb.	.06	.08	.08	.06	.08	.05½
Citrate, USP, VIII 25 lb can	lb.	.94	1.01	1.01	.94	1.01	.94
Hypophosphite, 5 lb cans	lb.	1.55	1.65	1.65	1.55	1.65	1.55
Iodide, 1 lb bottles	lb.	.....	4.28	4.28	4.28	4.28	4.28
Phosphate, USP, 50 lb cans	lb.	.....	.69	.69	.69	.69	.69
& Potas Oxalate, 250 lb bbl	lb.	.....	.45	.45	.45	.49	.45
Pyrophosphate, USP, 50 lb	lb.	.74	.80	.80	.74	.80	.74
& Sod Oxalate, 24 lb box	lb.	.....	.30	.30	.30	.30	.30
Sulfate, USP, crys bbls	lb.	.04½	.04	.04	.04½	.04	.04½
Ferrous dried bbls	lb.	.....	.08	.08	.08	.08	.08
Valerate, tins	lb.	2.75	3.00	3.00	2.75	3.00	2.75
Jalap Resin, USP lumps, 5 lb tins	lb.	.....	4.00	4.00	4.00	4.00	4.00
Powdered, tins	lb.	.....	4.65	4.65	4.65	4.65	4.65
Lead Acetate, USP, 100 lb kegs	lb.	.15	.18	.18	.15	.18	.15
Iodide, USP, VIII 5 lb bot	lb.	3.20	3.40	3.40	3.20	3.40	3.20
Lecithin, 5 oz jars	oz.	1.00	1.30	1.30	1.00	1.30	1.00
Licorice Ext Mass, cases	lb.	.14	.20	.20	.14	.20	.14½
Compound powder, bbls	lb.	.11	.13	.13	.11	.13	.11
LITHIUM CARBONATE, 250 lb bbls	lb.	1.50	1.60	1.60	1.50	1.60	1.50
Citrate, USP, 100 lb kegs	lb.	.....	1.70	1.70	1.70	1.70	1.70
Iodide, 5 lb bottles	lb.	.....	5.40	5.40	5.40	5.40	5.40
Lobeline Sulfate, ¼ oz vial	oz.	.....	8.75	8.75	8.75	8.75	8.75
Magnesium Carbonate, USP, 100 lb bbls	lb.	.....	.10½	.12	.10½	.12	.12
English, oz blocks	oz.	.16	.18	.18	.16	.18	.16
Glycerophosphate, 5 lb tins	lb	3.20	3.25	3.25	3.20	3.25	3.20
Hypophosphite 5 lb cans	lb.	.....	1.05	1.05	1.05	1.05	1.05
Salicylate, 100 lb kegs	lb	.....	1.10	1.10	1.10	1.10	1.10
Stearate, bbls	lb.	.23	.25	.25	.23	.25	.23
Manganese Glycerophosphate, 5 lb tins	lb.	2.90	3.00	3.00	2.90	3.00	2.90
Hypophosphite, USP, VIII 5 lb cans	lb.	1.35	1.40	1.40	1.35	1.40	1.35
Iodide, 1 lb bottles	lb.	6.40	6.65	6.65	6.40	6.65	6.40
MENTHOL, USP, 60 lb cases	lb.	5.15	5.20	6.00	5.15	6.25	4.10
Synthetic, cases	lb.	3.00	3.25	3.25	3.00	3.50	3.00
Mercury Metal, 75 lb flasks	fl.	1.22	1.23	124.00	122.00	134.00	120.00
Bichloride, crys 25 lb box	lb.	.....	1.81	1.81	1.81	1.81	1.81
Gran powd, 100 lb kegs	lb.	.....	1.65	1.65	1.65	1.65	1.65
Bisulfate, 25 lb boxes	lb.	.....	1.62	1.62	1.62	1.62	1.62
Blue Mass, 25 lb boxes	lb.	.....	1.03	1.03	1.03	1.03	1.03
Powd, 25 lb boxes	lb.	.....	1.04	1.04	1.04	1.04	1.04
Blue Ointment, USP, 50%, 25 lb cans	lb.	.....	1.29	1.29	1.29	1.29	1.29
Mild 30%, 25 lb cans	lb.	.....	.92	.92	.92	.92	.92
33⅓% mercury	lb.	.....	.94	.94	.94	.94	.94
Calomel, 50 lb boxes	lb.	.....	2.05	2.05	2.05	2.05	2.05
English	lb.	2.75	2.80	2.80	2.75	2.80	2.75
Iodide, green, 25 lb jars	lb.	.....	4.80	4.80	4.80	4.80	4.80
Red, USP, 25 lb jars	lb.	.....	4.89	4.89	4.89	4.89	4.89
Yellow, USP, VIII, 25 lb jars	lb.	4.80	4.80	4.80	4.80	4.80	4.80
Red precip, USP, 25 lb boxes	lb.	2.17	2.17	2.17	2.17	2.17	2.17
Powd., USP, 25 lb boxes	lb.	2.17	2.17	2.17	2.17	2.17	2.17
White precip, USP, 25 lb boxes	lb.	.....	2.20	2.20	2.20	2.20	2.20
Powd., USP, 25 lb boxes	lb.	.....	2.25	2.25	2.25	2.25	2.25
Salicylate, 25 lb bot	lb.	.....	2.32	2.32	2.32	2.32	2.32
With chalk, USP, 25 lb boxes	lb.	.....	.93	.93	.93	.93	.93
Methanol, Pure 1c-1 drs	gal.	.....	.57	.57	.57	.60	.48
Methyl Salicylate, USP, 50 lb cans	lb.	.42	.45	.45	.42	.45	.42
Methylene Blue, USP, med 5 lb cans	lb	2.00	2.05	2.05	2.00	2.05	2.00
Milk powd, 150 lb bbls	lb.	.14	.15	.15	.14	.15	.14
MORPHINE Alk, 5 oz tin	oz.	.....	9.85	9.85	9.85	10.15	9.85
Acetate, 5 oz tins	oz.	.....	7.85	7.85	7.85	8.25	7.85
Hydrobromide, 5 oz tins, 10 oz lots	oz.	.....	7.85	7.85	7.85	8.35	7.85
Hydrochloride, 5 oz tins, 10 oz lots	oz.	.....	7.75	7.85	7.85	8.35	7.85
Ethyl Hydrochloride, 5 oz tins 10 oz lots	oz.	.....	9.35	9.35	9.35	9.85	9.35
Sulfate, 5 oz tins, 10 oz lots	oz.	.....	7.85	7.85	7.85	8.35	7.85
Naphthalene Flake, 175 lb bbls wks	lb.	.04½	.05	.05	.04½	.05	.04½
Balls, 250 lb bbls wks	lb.	.05½	.06	.06	.05½	.06	.05½
Oil Mineral White, 50 ga bbls	bbls	.62	.67	.67	.60	.67	.60
bbls 80-85 vis	gal.	.65	.70	.70	.65	.70	.65
85-90 vis	gal.	.82	.92	.92	.65	.92	.70
125-130 vis	gal.	1.00	1.10	1.10	1.00	1.10	1.00
290 vis	gal.	.70	.75	.75	.70	.75	.70
Russian 110-115 vis	gal.	.67	.73	.80	.67	.80	.67
150-155 vis	gal.	.75	.80	.90	.75	.95	.80
325-335 vis	gal.	1.75	2.50	2.50	1.75	2.50	1.75
Oxgall, Purified, 5 lb bot	lb.	2.00	2.50	2.50	2.00	2.50	2.00
USP, 5 lb bot	lb.	8.50	9.25	9.25	8.50	9.25	8.50
Oxyquinoline Sulfate, tins	lb.						

Monthly Review

to its members by the association in the monthly liquidation of accounts averaged from 11.07 to 11.61 British pence per ounce.

Mercury Decision Coming Soon

The position of mercury on the surface is unchanged, but as one looks behind the scenes, the battle between the English speculators on the one hand and the producers' monopoly on the other, appears to be drawing to a close.

From the well-informed the statement is made that the English are in possession of only sufficient to last six weeks more if they continue to quote below the monopoly and take all the available consuming business. It must be appreciated that the English are selling well above cost at the present time, although they are selling below the monopoly's quotations and are forcing the monopoly to stock all their production at a time when production is being maintained at a peak rate.

The opinion is being formed in this country that the monopoly has won the strategic battle. After the English have sold all their goods, the nonopoly will be in complete control of the market abroad and the English speculators will be completely eliminated unless they choose to invest considerable sums of money in an uncertain investment.

If the English are willing to lose large sums of money to win the battle, they will buy more supplies from the monopoly at the monopoly's price and then continue to sell the consuming trade. However, this time they would have to sell the consuming trade at a loss instead of a profit.

If, on the other hand, the English are unwilling to spend this money in an uncertain venture, the price in Europe will be dictated by the monopoly and will reach dizzy heights.

Although production in this contry is steadily increasing, the foreign material will continue to govern the price here for some time. This is due to the fact that the domestic mines need as high a price as they can obtain in order to attract investors into the exploitation of quicksilver mines. Forecasts at of least a market of $150.00 per flask are common by the well informed on this side.

The position of the monopoly is such that they can easily outwait the English if they are willing to hold on to their stocks for a slightly longer period. During the months that they have held their stocks there has been no pressure on them to sell and it does not appear as though any pressure is forthcoming. In this event quicksilver is a good buy at present prices. There is some likelihood that the mines might want to dispose of the large surplus stocks that have been accumulated, but this is only a guess.

Phenol Position Very Strong

Phenol, which has been very scarce for some time, is even now in a stronger position with the demand exceptionally heavy. The price has not changed, however, manufacturers quoting 14c and 15c per pound. Resale lots have been quoted at 17½c per pound with the resalers having little or no stocks to offer.

The strong spot position of phenol was caused by the entrance into the field of phenol plastics of a number of new manufacturers upon the expiration of patents by one of the largest manufacturers. At practically the same time this large producer of phenol plastics discontinued making its own phenol and was in the market for large quantities.

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Pancreatin, USP, 100 lb....lb.	.....	1.90	1.90	1.90	.....	.....
Paraffin, refd, 200 lb cs slabs 118 -120 deg MP.....lb.	.08	.09	.09	.08	.09	.08
128-132 deg MP.....lb.	.07½	.07¾	.07¾	.07½	.07¾	.07½
Para-Aldehyde, USP, 100 gal drums.....lb.	.67	.77	.77	.67	.77	.67
Pepsin, USP, 100 lbs. 1:3000.lb.	.....	2.25	2.25	2.25	2.50	2.50
100 lbs. 1:6000.....lb.	.....	4.00	4.00	4.00	5.00	5.00
100 lbs. 1:10000.....lb.	.....	6.50	6.50	6.50	8.35	8.35
Peptone, powd, 5 lb bot.....lb.	.....	.....	.....	.....	.....	.....
Petrolatum, Lily White, USP 400 lb bbls.....lb.	.08	.09	.09	.08	.10	.09
Snow White, USP, 400 lb bbls.....lb.	.09¾	.10	.10	.09¾	.13½	.11¾
PHENOLPHTHALEIN, USP, 100 lb drums.....lb.	1.10	1.20	1.20	1.10	1.20	1.10
5 lb cans 100 lb lots..lb.	1.23	1.30	1.30	1.23	1.30	1.23
Pilocarpine Hydrochloride, USP, 1 oz vials 25 oz lots .....oz.	.....	3.25	3.25	3.25	3.25	3.25
Nitrate, 25 oz lots.....oz.	.....	3.25	3.25	3.25	3.25	3.25
Single ounce.....oz.	.....	3.50	3.50	3.50	3.50	3.50
Alkaloid, 15 gr vials.....vl.	.....	.75	.75	.75	.75	.75
Piperazine Hydrate, 1 lb bot.lb.	.....	15.00	15.00	15.00	15.00	15.00
Piperadine, 25 oz bottles....lb.	.....	8.00	8.00	8.00	8.00	8.00
Popodhyllin 5 lb bottles....lb.	4.35	4.50	4.50	4.35	4.50	4.35
Potassium Acetate, USP, 100 lb kegs.....lb.	.29	.30	.30	.29	.30	.29
Bicarb, USP, crys 320 lb bbls .....lb.	.13	.13½	.13½	.08½	.09	.08½
Bromide, USP, crys 100 lb cs .....lb.	.42	.43	.40	.39	.43	.42
Citrate, USP, 50 lb bbl....lb.	.51	.53	.55	.51	.55	.51
Guaiacol Sulfonate.....lb.	1.95	2.25	2.25	1.95	2.25	1.95
Hypophosphite, 10 lb cans.lb.	.80	.85	.85	.80	.85	.80
Iodide, USP, 100 lb cases..lb.	3.50	3.55	3.55	3.50	3.80	3.25
Lactophosphate, 4 oz bot..lb.	.....	.90	.90	.90	.90	.90
Permangan, USP, crys, 100 lb drs wks.....lb.	.15	.15½	.15½	.15	.16½	.14½
Phosphate dibasic pure, kegs .....lb.	.....	.49	.49	.49	.49	.49
Salicylate, 25 lb cans....lb.	.....	1.18	1.18	1.18	1.18	1.18
Sulfate, USP, VIII, 100 lb kegs.....lb.	.13	.15	.15	.13	.15	.13
Sulfocyanide, CP 15 lb jars lb.	.....	.50	.50	.50	.50	.50
Tartrate, CP, tins.....lb.	.....	.65	.65	.65	.65	.65
Pyrogallol, USP, see Acid Pyrogallic.....	.....	.....	.....	.....	.....	.....
Quinidine Alk, 100 oz tins...oz.	.70	.75	.75	.70	.75	.70
Sulfate, 100 oz tins.....oz.	.....	.50	.50	.50	.50	.50
QUININE SULFATE, USP, 100 oz tins.....oz.	.....	.40	.40	.40	.40	.40
1 oz tins, 100 oz lots....oz.	.....	.47	.47	.47	.47	.47
Dutch, 100 oz tins.....oz.	.....	.40	.40	.40	.40	.40
Java, 100 oz. tins.....oz.	.....	.40	.40	.40	.40	.40
Japanese 100 oz tins.....oz.	.....	.40	.40	.40	.40	.40
Acetate.....oz.	.....	.78	.78	.78	.78	.78
Arsenate.....oz.	.....	.78	.78	.78	.78	.78
Benzoate.....oz.	.....	.78	.78	.78	.78	.78
Bisulfate, USP.....oz.	.....	.40	.40	.40	.40	.40
Resale.....oz.	.37	.39	.39	.37	.39	.37
Citrate.....oz.	.....	.51	.51	.51	.51	.51
Dicarbonate, 1 oz tins....oz.	.....	2.56	2.56	2.56	2.56	2.56
Dihydrobromide.....oz.	.....	.54	.54	.54	.54	.54
Dihydrochloride, USP....oz.	.....	.54	.54	.54	.54	.54
Ethyl Carbonate, 16 oz tins .....oz.	.....	.58	.58	.58	.58	.58
Ferrocyanide.....oz.	.....	.78	.78	.78	.78	.78
Formate.....oz.	.....	.73	.73	.73	.73	.73
Glycerophosphate.....oz.	.....	.80	.80	.80	.80	.80
Hydrobromide, USP.....oz.	.....	.50	.50	.50	.50	.50
Hydrochlorosulfate.....oz.	.....	.54	.54	.54	.54	.54
Hydrochloride & Urea, USP .....oz.	.....	.74	.74	.74	.74	.74
Hypophosphite.....oz.	.....	.70	.70	.70	.70	.70
Lactate.....oz.	.....	.66	.66	.66	.66	.66
Phenolsulfonate.....oz.	.....	.78	.78	.78	.78	.78
Phosphate.....oz.	.....	.62	.62	.62	.62	.62
Salicylate, USP.....oz.	.....	.52	.52	.52	.52	.52
Tannate, USP.....oz.	.....	.41	.41	.41	.41	.41
Tartrate.....oz.	.....	.78	.78	.78	.78	.78
Valerate.....oz.	.....	.78	.78	.78	.78	.78
& Urea Hydrochloride, USP .....oz.	.....	.88	.88	.88	.88	.88
Rennet, N. F. 5 lb 1:25,000...lb.	2.95	3.50	3.50	2.95	3.50	2.95
Resorcinol, USP, 25 lb cans..lb.	1.60	1.65	1.75	1.65	2.00	1.70
Rochelle Salt, USP, 225 lb bbl .....lb.	.23	.23½	.23½	.23	.23½	.23
Imp. USP, 300 lb bbls.....lb	.....	.23	.23	.23	.23	.23
Rock Sugar, 5 lb boxes.....lb.	.....	.15	.15	.15	.15	.15
Saccharin, USP, 10 lb cans...lb.	1.70	1.80	1.80	1.70	1.80	1.70
USP, Soluble, 10 lb cans...lb.	1.75	1.85	1.85	1.75	1.85	1.75
Salicin, USP.....lb.	.....	4.86	4.86	4.86	4.86	4.86
SALOL, USP, 100 lb drums..lb.	.....	.90	.90	.90	.90	.90
Saltpetre, powd, bbls wks....lb.	.06½	.08½	.08½	.06½	.08½	.06½
Santonin, USP, bulk.....lb.	.....	129.50	129.50	129.50	145.00	129.50
Saponin, refined.....lb.	1.30	1.50	1.50	1.30	1.50	1.30
Siedlitz Mixture, 250 lb bb..lb.	.....	.....	.....	.....	.....	.....
Silver Metal, American.....oz.	.....	.57½	.57½	.57½	.60½	.57½
Iodide, 16 oz lots.....oz.	.....	.69	.69	.69	.69	.69
Nitrate, 100 oz bottles....oz.	.40½	.42½	.42½	.40½	.45	.40½
Nucleinate, bulk.....oz.	.....	.37	.37	.37	.37	.37
Proteinate.....oz.	.....	.32	.32	.32	.32	.32
Soap Castile, 50 lb boxes....lb.	.....	.25	.25	.25	.25	.25
USP, powd, 250 lb bbls....lb.	.28	.30	.30	.28	.30	.28
USP, green, 450 lb bbls....lb	.07½	.07½	.07½	.07½	.07½	.07½

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{ Monthly Review }

Whether this strong demand for phenol is temporary and may be lessened by the disappearance from the phenol plastic field of some of the new competition thereby decreasing the demand is problematical but no relief can be seen in the situation in the near future.

Menthol Eases Further

Menthol is a little easier being quoted at $5.15 and $5.20 for the U. S. P. reflecting a limited demand. A feature of the trade was news from Washington that the present duty of 50c per pound was to be raised to 75c in the Tariff now before the Ways and Means Committee of the House of Representatives.

As inactment of a tariff increase would react against sale of the imported product a stimulant to the production of synthetic menthol and probably natural menthol might be looked for in the United States.

Vanillin In Uncertain Position

Vanillin is in an unsettled position due to the activity of some importers. The competition in this product has become increasingly keen, and attempts are being made to have the American valuation upon which the duty is assessed, lowered. However, American manufacturers continue to give the price in "ordinary wholesale quantities" as the proper value to be considered. Importers state that the price at which orders for large lots are taken is the proper price upon which to assess the tariff.

Demand has been quite active from the consuming trade, but this activity on the duty question is taking the snap out of the market and causing manufacturers considerable worry and effort to straighten out. It will be remembered that some months ago, competition from importers caused the American manufacturers to lower their quotations with the result that the American valuation upon which the duty is assessed was likewise lowered. Now the importers are attempting to force the duty still lower so that they can come back into competition with the American manufacturers on a fairly equal basis.

British Synthetic Drugs

In a recent address before the British Science Guild, it was pointed out that most synthetic drugs, except guaiacol, phenazetin, and veronal, are now being manufactured in Great Britain, although it is understood that the manufacture of guaiacol is soon to be undertaken.

The making of synthetic thyroxine, which is now being carried out by British firms, is perhaps the most complex synthesis ever applied commercially. The knowledge given in the manufacture of adrenalin has made it comparatively easy to make ephedrine synthetically, although the product so obtained has a weaker action than the natural alkaloid. The manufacture of ephedrine hydrochloride was begun by two British firms about the middle of 1928.

Eucalyptus Oil Over-produced

The future position of the eucalyptus oil industry is receiving considerable attention in Australia, and some interesting points are discussed in "The Chemist and Druggist of Australasia" of March 9, 1929. The Forests Com-

	Current Market	1929 High	1929 Low	1928 High	1928 Low
SODIUM BENZOATE, USP, 100 lb bbls.....lb.	.45	.49	.49	.45	.55	.50
Bromide, USP, 100 lb kegs.lb.	.42	.43	.43	.42	.43	.42
Cacodylate, USP, 25 lb bot .....lb.	4.75	5.90	5.90	4.75	6.10	4.75
Citrate, USP, X 50 lb kegs.lb.	.45	.47	.47	.45	.47	.45
USP VIII, 50 lb kegs....lb.	.38	.40	.40	.38	.40	.38
Glycerophosphate, USP, crys 25 lb cans.....lb.	1.40	1.55	1.55	1.40	1.55	1.40
Powder, 25 lb tins.....lb.	1.45	1.60	1.60	1.45	1.60	1.45
Soln, USP, 25 lb tins...lb.	1.05	1.20	1.20	1.05	1.20	1.05
Hypophosphite, USP, 25 lb cans.....lb.	.70	.75	.75	.70	.75	.70
Iodide, USP, 25 lb jars...lb.	4.25	4.30	4.30	4.25	4.30	4.25
Phosphate (Mono-Sodium), 100 lb kegs.....lb.	.30	.31	.31	.30	.31	.30
Di-Sodium USP, granular, 275 lb bbls.....lb.	.07½	.08	.08	.07½	.08	.07¼
Pyrophosphate, 100 lb kegs .....lb.	.....	.29	.29	.29	.29	.29
Salicylate, 100 lb kegs....lb.	.....	.47	.47	.47	.47	.47
Silicate, 41° drums.....lb.	.....	.01½	.01½	.01½	..01½	.01½
47° drums.....drm.	.....	12.00	12.00	12.00	12.00	12.00
Sulfocarbolate, USP, 100 lb kegs.....lb.	.....	.31	.31	.31	.31	.31
Sulfocyanate, CP crys, jars included.....lb.	.....	.60	.60	.60	.60	.60
Spartein Sulfate, USP, 25 oz bulk.....oz.	.65	.70	.70	.60	.70	.60
Single oz vial.....oz.	.77	.90	.90	.77	.90	.77
Starch Rice, 140 lb bags.....lb.	.09	.10	.10	.09	.10	.09
STRONTIUM BROMIDE USP, 50 lb kegs.....lb.	.51	.52	.52	.51	.52	.51
Carb, 100 lb kegs wks....lb.	.....	.20	.20	.20	.20	.20
Iodide, USP, 25 lb jars....lb.	.....	4.00	4.00	4.00	4.00	4.00
Lactate, kegs.....lb.	.90	1.10	1.10	.90	1.10	.90
Nitrate, 600 lb bbls NY...lb.	.08	.08½	.08½	.08	.08½	.08
Imp. bbls NY.....lb.	.08	.08½	.08½	.08	.08½	.08
Salicylate, USP, 100 lb keg lb.	.....	1.10	1.10	1.10	1.10	1.10
Strophanthin, USP, 1 oz vial.oz.	.....	19.00	19.00	19.00	19.00	19.00
Crystals.....lb.	.....	75.00	75.00	75.00	75.00	75.00
Strychnine Alk, USP crys, 100 oz tins.....oz.	.....	.66	.66	.66	.66	.56
Powdered.....oz.	.....	.56	.56	.56	.56	.46
Acetate.....oz.	.....	.65	.65	.65	.65	.55
Arsenate, 25 oz cans.....oz.	.....	.65	.65	.65	.65	.55
Glycerophosphite, USP,...oz.	.....	.65	.65	.65	.65	.55
Hydrobromide.....oz.	.....	.65	.65	.65	.65	.55
Hydrochloride.....oz.	.....	.65	.65	.65	.65	.55
Hypophosphite.....oz.	.....	.75	.75	.75	.75	.65
Nitrate, USP.....oz.	.55	.72	.72	.55	.72	.52
Phosphate.....oz.	.....	.65	.65	.65	.65	.55
Sulfate, USP, crys, powd...oz.	.46	.56	.56	.46	.56	.38
Sugar, refined, 275 lb bbl 100 lb.	5.80	5.90	5.90	5.80	5.90	5.80
Milk, USP, 200 lb bbls...lb.	.18	.20	.20	.18	.20	.18
Sulfonethylmethane, USP, 10 lb boxes.....lb.	3.85	4.05	4.05	3.85	4.05	3.85
Sulonmethane, USP, 10 lb box .....lb.	2.65	3.85	3.85	2.65	3.85	2.65
Sulfur flwrs. washed, USP, 125 lb bbl.....lb.	.....	.06	.06	.06	.06	.06
Iodide, USP, VIII, 5 lb bot lb.	.....	4.55	4.55	4.55	4.55	4.55
TARTAR EMETIC, USP, 300 lb bbls.....lb.	.29	.31	.31	.29	.36	.32½
Terebene, tins.....lb.	.....	.85	.85	.85	.85	.85
Terpin Hydrate, USP, 100 lb kegs.....lb.	.40	.42	.42	.40	.47	.40
Theobromine Alk, 5 lb cans..lb.	1.90	2.25	2.25	1.90	2.25	1.90
Sod. Salicylate, 1 lb bot...lb.	.....	2.10	2.10	2.10	2.10	2.10
Sod. Benzoate, 1 oz vials..oz.	.....	1.00	1.00	1.00	1.00	1.00
Thymol, USP, 25 lb tins.....lb.	2.55	2.70	2.70	2.25	2.75	2.25
Iodide kegs.....lb.	6.00	7.00	7.00	6.00	7.00	6.50
Veratrine Alkaloid.....oz.	.....	2.25	2.25	2.25	2.25	2.25
Sulfate, 1 oz vials.....oz.	.....	2.25	2.25	2.25	2.25	2.25
Witch Hazel Ext., 50 gal bbl .....gal.	.80	1.00	1.00	.80	1.00	.80
Zinc Carb, USP, 100 lb keg..lb.	.28	.31	.31	.28	.31	.28
Chloride, USP, 25 jars ex..lb.	.24	.29	.29	.24	.29	.24
Iodide, 5 lb bottles.....lb.	.....	5.22	5.22	5.22	5.22	5.22
Oxide, USP, 100 lb bbls...lb.	.16½	.17½	.18	.16½	.18	.17
Stearate, USP, 50 lb bbl..lb.	.24	.26	.26	.24	.26	.22
Sulfate, USP, 100 lb bbl..lb.	.08	.09	.09	.08	.09	.08
Sulfocarbolate, 100 lb kegs..lb.	.23	.29	.29	.23	.29	.29

Natural Derivatives

Anethol, 2 lb bot.....lb.	1.25	1.30	1.30	1.25	1.30	1.25
Borneol, 1 lb bot.....lb.	2.40	2.50	2.50	2.40	2.60	2.40
Carvol, 5 lb bot.....lb.	3.50	3.60	3.60	3.50	2.85	3.50
Citral, 25 lb cans.....lb.	2.70	2.75	2.75	2.70	2.75	2.70
Citronellal, 1 lb bot.....lb.	2.70	2.75	2.75	2.70	3.25	2.70
Eucalyptol, USP, 50 lb cans..lb.	1.00	1.05	1.05	1.00	1.05	1.00
Eugenol, USP, 25 lb cans....lb.	2.70	2.75	2.75	2.70	2.90	2.70
Geraniol, domestic, 50 lb cases .....lb.	2.50	2.70	2.70	2.50	2.70	2.50
Imported, 5 lb bot.....lb.	2.90	3.10	3.10	2.90	3.10	2.90
Iso-Eugenol, 1 lb bot.....lb.	3.75	3.80	3.80	3.75	4.50	3.75
Imported, 1 lb bot.....lb.	3.70	3.80	3.80	3.70	3.80	3.70
Linalol from Bois de Rose, 5 lb bot.....lb.	3.20	3.25	3.25	3.20	3.25	3.00
Rhodinol, 1 lb bot.....lb.	7.50	7.75	7.75	7.50	7.75	6.00
Saffrol, drums.....lb.	.....	.27	.27	.27	.27	.27
60 lb cans.....lb.	.....	.29	.29	.29	.29	.29

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683 Antonia Ave.

Monthly Review

mission of the Victorian Government recently decided that private distillers were not making the best of their opportunities, and it was decided to test the whole industry by establishing an experimental distillery near Tarnagulla. It was concluded that the methods of private distillers were inelastic, and that from a given quantity of leaves twice as much oil as at present yielded could be obtained. Another argument of the Forests Commission was that different kinds of leaves often require modifications of process, and that, speaking generally, the distillers were not using the appropriate treatment. It was pointed out that the Government had no intention of competing in the open market and that the research would be carried out in the hope that the discoveries would eventually benefit private enterprise. Tremendous opposition has been experienced, and the project has been described as "a futile and unwarranted interference with an established industry." However, there was no stopping the machinery of the Government, and operations were duly commenced on the installation of plant at Tarnagulla. As time went on a public meeting was held at Tarnagulla to discuss the Ministry's proposal to dispose of the eucalyptus plant at Waangarra. It was contended by a speaker that it would be in the interests of Tarnagulla and the State for the Government to retain the plant already erected. Experimental work, it was suggested, should be continued and better marketing methods investigated. After further discussion the Minister (Mr. Pennington) agreed to suspend further work of installation, and asserted that as the oil was practically unsaleable the Government would not be justified in working the plant. He regretted that the industry was in such a bad way, and he would personally consider any offer of local co-operation. There was a feeling in the district that the opening of a State distillery would have provided additional employment, but the same effect could be obtained by extending the forest thinning work. An application is to be made to the Treasury for money for this purpose. During the discussion it was stated that the supply of eucalyptus oil greatly exceeded the demand, and besides a stock of twenty tons held by the Forests Commission there were also, in the hands of private distillers, large quantities, for which no market could be found. Prices are very low, and though values have been stable during the past winter, it seems certain that production will be curtailed unless a more economic return is available to the distillers.

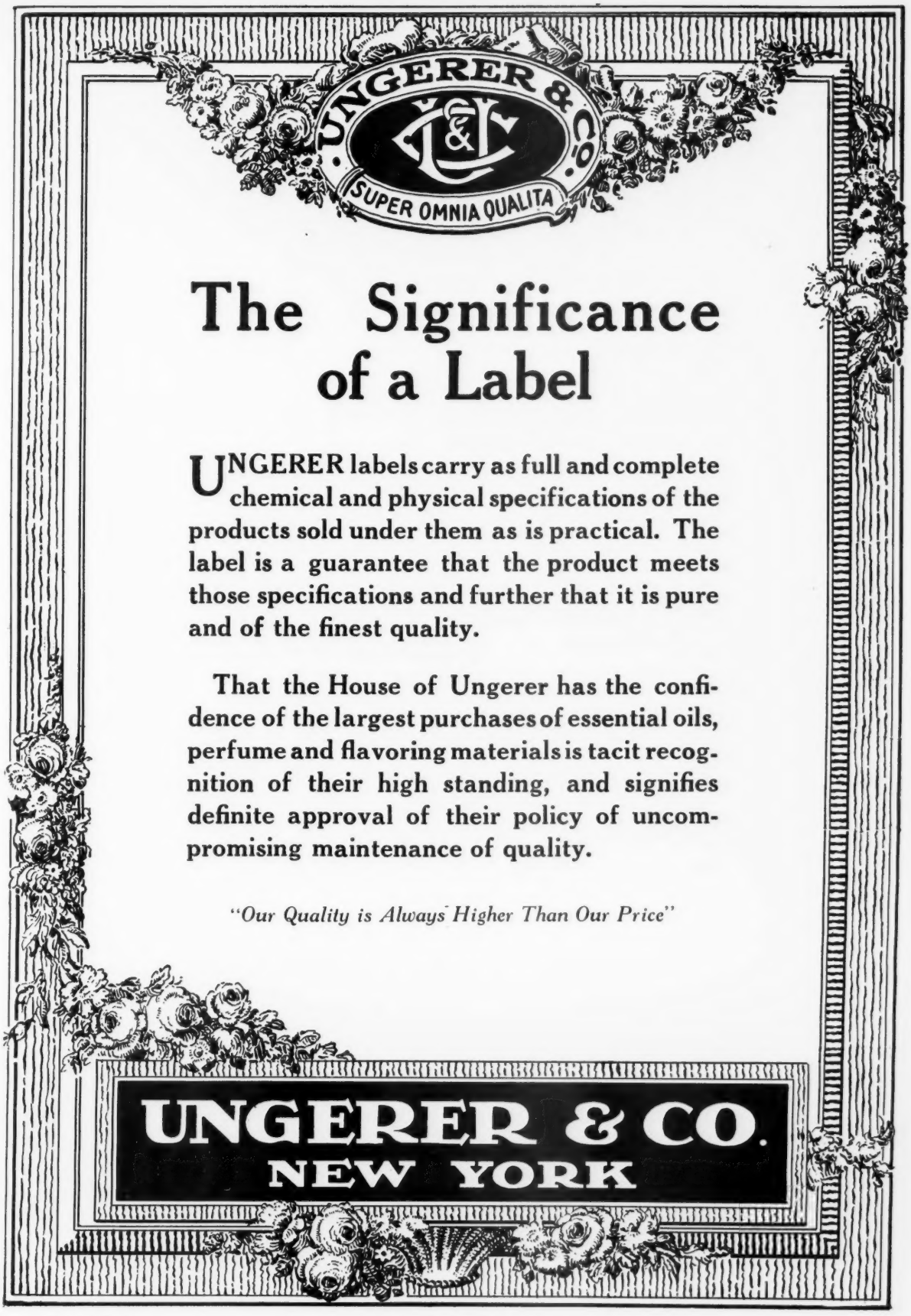
Ceylon Citronella Exports Decrease

In 1928 Ceylon's total exports of citronella oil amounted to only 1,200,000 pounds, valued at $376,500, against 1,358,000 pounds in 1927. The shortage early in the year brought about high prices, which dropped later only to rise again toward the end of the year. Exports to the United States decreased from 607,353 pounds valued at $180,700 in 1927 to 441,257 pounds, valued at $157,790 in 1928. The United Kingdom, Germany, and Italy all imported larger quantities than they did in 1927, while other countries took considerably less.

Citronella, Java, was reported higher abroad, Europe paying more for the oil at the primary source of supply. Prices quoted here are 52c per lb. an advance of 3c. Ceylon remains unchanged. Stocks of both Java and Ceylon are reported as "moderate."

Synthetic Aromatics

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Acetophenene, CP, 1 lb bot. .lb.	3.50	3.65	3.65	3.50	3.75	3.50
Aldehyde, C 8 (Otcyl) 1 lb bot .....lb.	.....	55.00	55.00	55.00	55.00	55.00
C 7, 1 lb bot.....lb.	4.50	5.50	5.50	4.50	5.50	4.50
C 9 (Nomyl), 1 lb bot....lb.	.....	140.00	140.00	140.00	140.00	140.00
C 10 (Decyl), 1 lb bot....ib.	.....	48.00	48.00	48.00	48.00	48.00
C 14, 1 lb bot.....lb.	22.50	25.00	25.00	22.50	25.00	22.50
C 16, 1 lb bot.....lb.	31.00	32.00	32.00	31.00	80.00	31.00
Aubepine, see Anisic Aldehyde						
AMYL ACETATE, pure, 5 gal cans.....gal.	4.75	5.50	5.50	4.75	5.50	4.75
Butyrate, 1 lb bot.....lb.	1.70	1.75	1.75	1.70	1.90	1.70
Butyrate, 5 lb bot.....lb.	.....	1.75	1.75	1.75	1.75	1.75
Cinnamate, 5 lb bot.....lb.	9.50	9.75	9.75	9.50	9.75	9.50
Formate, 1 lb bot.....lb.	.....	1.90	1.90	1.90	1.90	1.90
Formate, 5 lb bot.....lb.	.....	1.75	1.75	1.75	1.75	1.75
Phenyl Acetate, 1 lb bot...lb.	4.50	5.00	5.00	4.50	5.00	4.50
Salicylate, 100 lb cbys.....lb.	1.25	1.30	1.30	1.25	1.30	1.25
Imported.....lb.	2.25	2.50	2.50	2.25	2.50	2.25
Anisic Aldehyde, 1 lb bot....lb.	3.00	3.25	3.25	3.00	3.25	3.00
Benzaldehyde, USP, 40 lb cbys .....lb.	.....	.....	.....	.....	.....	.....
50 lb cbys.....lb.	1.25	1.35	1.35	1.25	1.35	1.25
FFC, 40 lb cbys.....lb.	1.35	1.45	1.45	1.35	1.45	1.35
Benzoic Ether, see Ethyl Benzoate.....						
Benzophenone, 1 lb bot.....lb.	4.50	5.00	5.00	4.50	5.00	4.50
Benzyl Acetate, 100 lb cbys..lb.	.90	1.10	1.10	.90	1.10	.90
Alcohol, 5 lb bot.....lb.	1.25	1.35	1.35	1.25	1.35	1.25
Benzoate, 5 lb bot.....lb.	1.25	1.35	1.35	1.25	1.35	1.25
BENZYL BENZOATE.....	1.35	1.40	1.40	1.35	1.40	1.35
Medicinal, FFC.....lb.	.....	1.40	1.40	1.40	1.40	1.40
Buytrate, CP, 1 lb bot....lb.	9.25	9.50	9.50	9.25	9.50	9.25
Cinnamate, 1½ bot.....lb.	9.25	9.50	9.50	9.25	9.50	9.25
Formate, 1 lb bot.....lb.	3.15	3.25	3.25	3.15	3.75	3.15
Propionate, 1 lb bot.....lb.	3.60	3.75	3.75	3.60	3.75	3.60
Succinate, 1 lb bot.....lb.	5.25	5.50	5.50	5.25	5.50	5.25
Valerate, 5 lb bot.....lb.	3.00	3.25	3.25	3.00	3.25	3.00
Bornyl Acetate, 1 lb bot....lb.	2.90	3.00	3.00	2.90	3.25	2.90
Bromstyrol, 25 lb cases.....lb.	4.10	4.25	4.25	4.10	5.00	4.10
Butyl Anthranilate dom, 1 lb bot.....lb.						
Butyric Ether, see Ethyl Butyrate.....						
Cinnamic Acid, 5 lb cans....lb.	3.25	3.50	3.50	3.25	3.50	3.25
Alcohol liquid, 1 lb bot...lb.	3.25	3.35	3.35	3.25	3.50	3.25
Crystallizable.....lb.	7.00	8.00	8.00	7.00	8.00	7.00
Aldehyde.....lb.	2.25	2.50	2.50	2.25	2.50	2.25
Imported, 1 lb bot.....lb.	7.75	9.00	9.00	7.75	9.00	7.75
Citronelyl Acetate, 1 lb bot..lb.	7.75	8.00	8.00	7.75	8.00	7.75
Coumarin, 25 lb cans.....lb.	3.50	4.00	4.00	3.50	4.00	3.50
DECYL ALCOHOL.....lb.	25.00	28.00	28.00	25.00	28.00	25.00
Diethyl Phthlate see Chemicals						
Diphenyloxide, 25 lb tins....lb.	1.00	1.15	1.15	1.00	1.15	1.00
Diphenyl Methane.....lb.	1.50	1.75	1.75	1.50	1.75	1.50
Duodecyl Alcohol.....lb.	20.00	22.00	22.00	20.00	22.00	20.00
Ethyl Acetate, pure, 5 lb bot.lb.	.45	.50	.50	.45	.50	.45
Benzoate, 5 lb bot.....lb.	1.50	1.75	1.75	1.50	1.75	1.50
Ethyl Butyrate, 5 lb bot....lb.	1.80	2.00	2.00	1.80	2.00	1.80
Caproate, 1 lb bot.....lb.	3.25	3.50	3.50	3.25	3.50	3.25
Cinnamate, 1 lb bot.....lb.	4.00	4.50	4.50	4.00	4.50	4.00
Formate, 5 lb bot.....lb.	1.00	1.25	1.25	1.00	1.25	1.00
Methyl Paracresol, 1 lb bot .....lb.	3.25	3.50	3.50	3.25	3.50	3.25
Phenyl Acetate, 5 lb bot..lb.	3.75	4.00	4.00	3.75	4.00	3.75
Valerate, 5 lb bot.....lb.	.....	3.75	3.75	3.75	3.75	3.75
Salicylate, 5 lb bot.....lb.	1.95	2.00	2.00	1.95	2.10	1.95
Formic Ether see Ethyl Formate						
Geranyl Acetate, 1 lb bot....lb.	3.20	3.25	3.25	3.20	3.25	3.20
Butyrate, 1 lb bot.....lb.	13.00	13.50	13.50	13.00	13.50	13.00
Formate, 1 lb bot.....lb.	12.00	12.50	12.50	12.00	12.50	12.00
Glyco Ester.....lb.	.90	1.00	1.00	.90	1.00	.90
Heliotropin, 100-10 lbs.....lb.	1.65	1.75	1.75	1.65	1.75	1.65
Imported.....lb.	1.95	2.05	2.05	1.95	2.05	1.95
Hydroxycitronellal, 1 lb.....lb.	5.50	7.50	7.50	5.50	7.50	5.50
Indol, CP, 1 oz bot.....oz.	2.90	3.00	3.00	2.90	4.50	2.90
IONONE, 1 lb bot 100%...lb.	5.00	6.00	6.00	5.00	7.00	5.00
Alpha.....lb.	4.80	5.00	5.20	4.80	6.25	4.75
Beta.....lb.	5.70	5.75	5.75	5.70	7.25	5.50
Methyl.....lb.	5.75	6.00	6.00	5.75	7.25	5.75
Iso Borneol.....lb.	2.15	2.25	2.25	2.15	2.25	2.15
Iso Bornyl Acetate.....lb.	2.80	3.00	3.00	2.80	3.00	2.80
Iso-Butyl Benzoate, 5 lb bot.lb.	2.75	3.00	3.00	2.75	3.00	2.75
Iso-Safrol, 1 lb bot imp.....lb.	1.65	1.75	1.75	1.65	1.75	1.65
Domestic, 5 lb bot.....lb.	3.50	3.75	3.75	3.50	3.75	2.50
Lynalyl Acetate, 1 lb bot....lb.	3.25	4.25	4.25	3.25	4.50	3.25
Benzoate, 1 lb bot.....lb.	13.00	14.00	14.00	13.00	14.00	13.00
Formate, 5 lb bot.....lb.	10.50	12.00	12.00	10.50	12.00	10.50
METHYL ACETOPHENONE .....lb.	3.35	3.50	3.50	3.35	3.75	3.35
Anthranilate, 1 lb bot.....lb.	2.40	2.45	2.45	2.40	2.45	2.40
Imported.....lb.	2.70	2.75	2.75	2.70	2.75	2.70
Anthranilic Acid.....lb.	11.75	12.00	12.00	11.75	12.00	11.75
Benzoate, 5 lb bot imp....lb.	1.75	1.85	1.85	1.75	2.00	1.75
Domestic, 5 lb bot.....lb.	1.75	2.00	2.00	1.75	2.00	1.75
Cinnamate, 1 lb bot.....lb.	3.75	4.25	4.25	3.75	4.25	3.75
Heptenone, 1 lb bot.....lb	8.50	9.00	9.00	8.50	9.00	8.50
Paracresol, 1 lb bot.....lb	4.50	8.00	8.00	4.50	8.00	4.50
Phenylacetate, 5 lb bot...lb	3.75	4.00	4.00	3.75	4.00	3.75
*Salicylate, USP, 500 lb dr..lb.	.....	.40	.40	.40	.40	.40
50 lb cases.....lb.	.....	.42	.42	.42	.42	.42
Mirbane rect, 1,000 lb drs...lb.	.12	.13	.13	.12	.13	.12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{ Monthly Review }

American Oil Breaks Orange Market

Orange oil is again lower, reflecting the weakened position of this commodity due to rather large stocks here and abroad. The heavy demand usually experienced at this time has not as yet materialized due to the unseasoned weather and dealers have been inclined to accept lower bids when the opportunity to more stocks was offered.

The Italian oil is being quoted in quantity at $5.40 per lb. and the American oil at $3.85 to $4.00 as to quantity. This represents another substantial decrease over last month's quotations of $5.65 for the Italian and $4.50 for for the American oil.

Exports of American orange oil during April amounted to 13,315 lbs., valued at $59,282, distributed as follows: United Kingdom, 10,180 lbs., value $45,845; France, 1,482 lbs., value $5,925; Canada,1,062 lbs., value $5,175. The remainder was consigned to Mexico, Cuba, Philippine Islands, and Australia.

The April exports nearly equalled the quantity and exceeded the value of the exports for the first quarter, which were 13,972 lbs., valued at $48,731.

Lemon Weakened by American Oil

Lemon oil has receded still further in the past month. The Italian oil being quoted at $4.20, a decline of 20c from the high of a month ago. The California oil is also lower at $3.65, representing a reduction of 25c per lb. over the high of last month.

The lessened demand for fresh fruit abroad has caused more of it to be consigned to the pressers, and together with an exceptionally large California crop resulted in lowering quotations both here and abroad.

Oil of Bay was in good demand with stocks none too heavy. Price on 50-55% phenol advanced to $2.40 per lb. which is 10c above last month's figure.

Bergamot reacted to the small demand orders being taken at $4.15. Competitive shading of prices was responsible for the decline, the small demand being unable to prevent this.

Caraway is higher, selling at $1.95. This reflects the scarcity of the seed, and as one dealer remarked, "we may expect some action." Import prices are coming in much higher and should be reflected in future quotations.

Croton oil is very scarce due principally to a scarcity of the bean. Price has advanced to $1.80 per lb. which represents an increase of 100% on this commodity in a few weeks. Cost of procuring this product is also a factor in the high price. Demand is routine.

Geranium oil is in a very interesting position with all grades advancing. African is quoted at $5.15 from $4.75. Bourbon at $5.50 from $4.90. Higher cables are coming in from France advising of a scarcity in this commodity. Production is small and a scarcity in the primary markets is now a certainty.

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Musk Ambrette 1 lb cans...lb	6.50	6.75	6.50	6.75	6.50
Ketone 1 lb cans.....lb	8.00	8.15	8.00	8.15	8.00
Xylene 5 lb cans.....lb.	2.25	2.35	2.25	2.35	2.25
Nerolin 1 lb cans.....lb.	1.35	1.40	1.35	1.50	1.35
Octyl Alcohol 1 lb bot.....lb.	30.00	32.00	30.00	32.00	30.00
Oenanthic Ether lb bot.....lb.	1.90	2.00	1.90	2.00	1.90
Paracresol Methyl Ether....lb.	6.50	6.75	6.50	6.75	6.50
Paracresyl Acetate.....lb.	5.50	5.75	5.50	5.75	5.50
Para Cymene Refd 110 gal dr .....gal.	2.25	2.50	2.50	2.25	2.50	2.25
PHENYLACETALDEHYDE						
50% 1 lb bot.....lb.	4.75	5.00	5.00	4.75	7.50	4.75
Imported 50%.....lb.	4.75	5.00	5.00	4.75	6.50	4.75
100%.....lb.	8.00	8.25	8.25	8.00	8.25	8.00
Phenylacetic Acid 1 lb bot..lb.	3.00	3.25	3.25	3.00	3.25	3.00
Phenyl Diacetate 1 oz bot...oz.	3.00	3.25	3.25	3.00	3.25	3.00
1 lb bot.....lb.	8.00	10.00	10.00	8.00	10.00	8.00
Imported.....lb.	7.00	7.75	7.75	7.00	7.75	7.00
Phenylethyl Alcohol 1 lb bot.lb.	4.50	4.75	4.75	4.50	4.75	4.50
Phenyl Ethyl Acetate.....lb.	8.25	8.75	8.75	8.25	8.75	8.25
Butyrate 1 lb bot.....lb.	15.00	16.00	16.00	15.00	16.00	15.00
Formate, 1 lb bot.....lb.	19.00	21.00	21.00	19.00	21.00	19.00
Propionate, 1 lb bot.....lb.	16.00	18.00	18.00	16.00	18.00	16.00
Valerate, 1 lb bot.....lb.	19.00	20.00	20.00	19.00	20.00	19.00
Phenylpropylalcohol, 1 lb bot .....lb.	12.00	12.50	12.50	12.00	16.00	12.00
Skatol, 1 oz bot.....lb.	4.50	7.00	7.00	4.50	7.00	4.50
Terpinyl Acetate, 25 lb cans..lb.	.75	.80	.80	.75	.80	.75
Imported, 25 lb cans.....	.85	.90	.90	.85	.90	.85
TERPINEOL, CP, 1000 lb drs .....lb.	.33	.35	.35	.33	.35	.33
50 lb cans.....lb.	.37	.39	.39	.37	.39	.37
Absolute, 25 lb cans.....lb.	.48	.50	.50	.48	.50	.48
Imported, 25 lb cans...lb.	.58	.60	.60	.58	.60	.58
Vanillin, USP, 25 lb tins....lb.	.....	7.00	7.00	7.00	7.50	7.00
1 lb cans.....lb.	.....	7.15	7.15	7.15	7.70	7.15
Second Hands.....lb.	.....	6.75	6.75	6.75	6.75	6.75
Valerianic Ether see Ethyl Valerate.....						
Yara Yara, 1 lb cans.....lb.	1.50	1.60	1.60	1.50	1.60	1.50

Essential Oils

Almond Bitter, USP, 5 lb bot lb.	2.75	2.85	2.85	2.70	2.80	2.70
Bitter, ffPA, 5 lb bot.....lb.	*3.00*	*3.10*	*3.10*	*3.00*	*3.25*	*3.00*
Sweet, 56 lb cans.....lb.	.73	.76	.85	.73	.85	.75
Amber crude, 25 lb tins.....lb.	.33	.35	.35	.33	.35	.33
Rectified, 25 lb tins.....lb.	*.52*	*.55*	*.55*	*.52*	*.55*	*.52*
Angelica Root, 1 lb bot.....lb.	21.00	23.00	24.00	21.00	28.50	16.00
Anise Tech, 400 lb drums...lb.	.69	.74	.74	.55	.58	.54
USP, 60 lb cans.....lb.	*.70*	*.74*	*.74*	*.58*	*.61*	*.57*
Apricot Kernel, 50 lb cans...lb.	.40	.42	.46	.40	.50	.44
Bay, 25 lb tins N. F. V., 50.55% Phenol.....lb.	2.40	2.60	3.00	2.30	3.00	1.90
Terpeneless.....lb.	5.80	6.00	6.00	5.80	6.00	5.80
BERGAMOT, 25 lb coppers.lb.	4.15	4.95	5.35	4.15	6.10	4.85
Terpeneless.....lb.	*14.00*	*18.00*	*18.00*	*14.00*	*18.00*	*14.00*
Artificial, 25 lb cans.....lb.	2.50	3.25	3.25	2.50	3.25	2.50
Birch, Sweet, Northern, 25 lb tins.....lb.	*3.75*	*4.00*	*4.00*	*3.75*	*4.00*	*3.75*
Southern, 25 lb tins.....lb.	.....	1.95	1.95	1.95	1.95	1.95
Birch Tar, rect., 5 lb bot.....lb.	.50	.55	.55	.50	.55	.50
Crude, 50 lb tins.....lb.	*.12*	*.13*	*.13*	*.12*	*.13*	*.12*
Bois de Rose, tins.....						
Brazillian.....lb.	1.55	1.60	1.70	1.55	2.00	1.80
Cayenne, tins.....lb.	1.90	2.00	2.35	1.90	2.60	2.05
Cade, 25 lb cans.....lb.	.25	.27	.27	.25	.27	.25
Cajuput, native, 50 lb tins..lb.	.83	.88	.88	.70	.75	.70
Calamus, 5 lb bot.....lb.	3.40	3.50	3.50	3.40	3.50	3.40
Camphor Sassa, 1000 lb drs..lb.	.21	.22	.22	.14½	.15½	.14½
White, 400 lb drs.....lb.	.19	.22	.22	.10½	.12½	.10½
Cans, 50 lbs.....lb.	.22	.24	.24	.14	.15	.14
CANANGA, Native 25 lb tins .....lb.	2.90	3.15	3.25	2.90	3.50	3.00
Rectified, 25 lb tins.....lb.	3.40	3.50	3.50	3.40	4.00	3.40
Caraway, USP.....lb.	1.95	2.00	2.00	1.65	1.85	1.65
Cardamon, NF, 1 lb bot.....lb.	25.00	38.00	38.00	25.00	38.00	25.00
Cascarilla, USP, 1 lb bot.....lb.	75.00	90.00	90.00	50.00	64.00	50.00
Cassia, 80-85%, 400 lb drs..lb.	.....	Nom.	.....	.....	*1.45*	*1.30*
Redist, USP, 50 lb cans...lb.	1.55	1.60	2.10	1.55	3.25	1.70
Cedar Leaf, 50 lb tins.....lb.	1.00	1.05	1.05	.95	1.35	.90
Cedar Wood, light, 1000 lb drs .....lb.	.26	.28	.28	.26	.29	.24
Celery, 1 lb bot.....lb.	.....	7.75	7.75	7.75	8.50	7.25
Chaulmoogra, USP 80 lb cases lb	.....	1.50	1.50	1.20	1.20	1.20
Cinnamon Ceylon, 1 lb bot...lb.	9.50	13.00	13.00	9.50	13.00	9.75
Leaf, 5 lb bot.....lb.	1.85	1.95	1.95	1.60	1.75	1.60
CITRONELLA Ceylon, 1000 lb drs.....lb.	.45	.46	.48	.44	.56	.33
50 lb tins.....lb.	.46	.48	.49	.46	.58	.35
Java, 400 lb drs.....lb.	.52	.54	.54	.49	.51	.40
50 lb tins.....lb.	.55	.57	.57	.52	.54	.43
Cloves, USP, 50 lb cans.....lb.	2.60	2.70	2.70	2.60	2.65	1.25
6 lb bot.....lb.	2.80	2.90	2.90	2.80	2.75	1.35
Copaiba.....lb.	.....	.80	.80	.80	.80	.65
Coriander, USP, 10 lb bots..lb.	7.25	7.75	11.25	7.25	14.00	10.50
Croton USP, 25 lb tins.....lb.	1.60	1.65	1.65	.90	.95	.90
Cubebs, USP, 5 lb bot.....lb.	2.90	3.00	3.00	2.90	3.45	2.90
Cumin, 1 lb bot.....lb.	.....	3.75	3.75	3.75	3.75	3.75
Dill, 25 lb cans.....lb.	3.75	3.85	3.85	3.75	4.25	3.75
Erigeron, 20 lb tins.....lb.	1.80	1.90	1.90	1.80	2.50	1.80
EUCALPYTUS Austl, USP, 56 lb cans, cases.....lb.	.54	.55	.60	.54	.60	.59
500 lb drs.....lb.	.52	.54	.59	.52	.59	.58

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Essential Oils

{ Monthly Review }

Essential Oil Import Comparisons

Many interesting changes will be noted in imports of essential oil for the first four months of 1929, as against a similar period last year. The quantity and value of cassia and cinnamon oil both increased. However, the value per pound jumped from $1.12 to $1.40. An outstanding change occurred in the case of geranium oil, the quantity of imports being two-thirds less while the difference in value was only a little less than one-half. Attar of roses, one of the most important, although from a quantity viewpoint one of the smallest imports next to sandalwood, decreased approximately one-third in quantity but only one-tenth in value. Bergamot decreased approximately nine per cent. in quantity and 15 per cent. in value, thus indicating a slightly lower price. Citronella and lemon grass imports increased both in quantity and value. The increase in value amounted to about four cents a pound. There was 50 per cent. more lavender and spike lavender imported and a corresponding increase in the value. Although imports of lemon oil were nearly 75,000 pounds less, the value increase was $122,000. Orange oil imports likewise are worthy of comment, the quantity imported increasing less than 2,000 pounds, while the value jumped from $227,000 to $464,000, or more than double the previous year's amount. An increase is also noted in the value of the sandalwood oil imports.

The following table gives the quantity and value of essential oil imports into the United States for the first four months of 1928 and 1929:

	Three Months Ending March			
	1928		*1929*	
	Pounds	*Value*	*Pounds*	*Value*
Cassia and cinnamon	84,935	$ 94,227	99,179	$137,416
Geranium	33,587	92,295	12,917	53,600
Otto of roses	5,776	56,862	7,023	93,168
Bergamot	32,991	164,907	34,995	167,398
Citronella and lemon grass	338,406	132,209	259,883	116,056
Lavender and spike lavender	54,220	167,597	94,118	263,123
Lemon	166,597	312,425	124,449	380,652
Orange	68,978	166,632	82,803	380,463
Sandalwood	1,876	4,028	11,695	61,465
All other essential and distilled oils	836,689	374,513	1,315,279	567,263

Coriander, which had been quoted very high at $8.00 is now subject to shading in price and is gradually receding. $7.25 is being asked with competition rather keen.

Cajaput advances 5c per lb. to 83c due principally to spot stock limitation. Demand was also good giving additional support to the market.

Limes are strong as the season of greatest demand approaches with stocks on hand nill. As the production season on this product closely follows the season of largest demand no relief can be expected from the situation of scarcity now prevailing.

Sandalwood prices are firm, East Indian being quoted at $8.00. The West Indian oil has advanced to $2.85 reflecting government supervision of this grade.

Cloves are steady in tone at 36½c to 37c for Zanzibar with the prospect of higher prices before the end of the summer.

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Fennel, USP, 25 lb tins.....lb.	.80	.90	.85	.80	.85	.80
Geranium African, 25 lb tins..lb.	5.15	5.25	5.25	3.85	4.25	3.00
Bourbon, 28 lb tins.....lb.	5.50	5.85	5.85	4.25	4.90	3.00
Turkish, 28 lb tins.....lb.	3.25	3.35	3.35	3.00	3.35	2.45
Ginger, 1 lb bot.....lb.	6.00	6.25	6.25	6.00	6.75	4.80
Gingergrass, 28 lb tins.....lb.	2.50	2.70	2.70	2.50	2.70	2.50
Hemlock, 25 lb tins.....lb.	1.05	1.10	1.10	1.05	1.10	1.00
Juniper Berries, USP, 25 lb tins .....lb.	2.05	2.10	2.15	2.05	3.75	2.10
Wood, 50 lb tins.....lb.	.50	.60	.60	.50	.60	.50
LAVENDER, USP, 28 lb tins .....lb	3.25	3.40	3.40	3.25	3.85	3.00
Spike Spanish, 50 lb cans..lb.	.90	.95	.95	.90	1.05	.90
Lemon Ital, 25 lb cans.....lb.	4.20	5.25	5.75	4.20	4.85	2.30
California 35 lb chys....lb.	3.65	3.80	4.65	3.65	4.35	1.85
Lemongrass, native, 50 lb cans .....lb.	.81	.83	.83	.81	.95	.81
Limes, expressed, 25 lb tins..lb.	22.00	23.00	23.00	20.00	25.00	9.25
Distilled, 25 lb tins.....lb.	9.25	9.75	9.75	7.75	8.50	6.00
Linaloe Mex., 70 lb cases....lb.	2.20	2.25	2.25	2.20	2.45	1.90
Mace, distilled, 50 lb tins....lb.	1.75	1.80	1.80	1.75	1.85	1.60
Mandarin, 25 lb cases.....lb.	11.00	11.50	11.50	11.00	11.50	7.50
Mirbane, ref Aromatic Chemicals.....						
MUSTARD, USP, 1 lb bots..lb.	9.50	10.00	10.00	9.50	10.00	9.50
Artif, USP, 5 lb bot.....lb.	1.60	1.70	1.70	1.60	2.00	1.60
Neroli Bigarade, ½ & ¼ & 1 lb bot .....lb.	95.00	125.00	140.00	75.00	140.00	75.00
Petale, 1 lb bot.....lb.	160.00	170.00	170.00	160.00	170.00	160.00
Artificial, 1 lb bot.....lb.	5.00	15.00	15.00	5.00	15.00	5.00
Nutmeg, USP, 50 lb tins....lb	1.75	1.80	1.80	1.75	1.80	1.60
ORANGE BITTER, 25 lb tins .....lb	5.50	5.75	6.75	5.00	8.75	2.70
Sweet W Ind, 25 lb tins..lb	5.35	5.60	6.50	4.95	8.75	2.60
Italian, 25 lb cop.....lb.	5.40	6.25	7.35	5.10	9.00	2.80
American, Cold pressed 25 lb tins.....lb.	5.10	5.35	7.40	4.90	8.75	3.50
Distilled, 25 lb tins....lb.	3.85	4.00	5.25	3.85	7.75	2.20
Spanish, 25 lb tins.....lb.	6.25	6.40	7.15	5.25	8.75	3.00
Oil Orris, concrete.....oz.	6.00	6.25	6.25	2.50	4.90	2.50
Origanum, 50 lb cans tech...lb.	.28	.30	.30	.28	.30	.28
Parsley, 1 lb bot.....lb.	9.00	9.25	9.25	8.00	8.25	6.50
Patchouli, 5 lb bot.....lb.	6.75	7.00	7.00	6.75	13.00	7.25
Pennyroyal, dom, 25 lb tins..lb.	1.55	2.10	2.10	1.55	1.90	1.55
Imported, 25 lb tins.....lb.	.....	1.20	1.20	1.55	1.55	1.20
Pepper Black lb.....	.10 25	.....	.....	.....	.....	.....
Peppermint, nat. 60 lb cases lb.	2.85	3.10	3.30	2.85	3.55	3.10
Redis, USP, 60 lb cs.....lb.	3.10	3.25	3.55	3.10	3.65	3.40
Petit Grain S A., 25 lb tins..lb.	1.95	2.05	2.05	1.90	2.10	1.50
French, 1 lb bot.....lb.	6.25	6.50	6.50	6.25	6.50	6.25
Italian, 25 lb tins.....lb.	2.20	2.30	2.30	2.20	2.30	2.20
Pimento, 25 lb tins.....lb.	2.50	2.75	2.75	2.25	3.25	2.55
Pineedle Siberian, cans.....lb.	.60	.65	.65	.60	.85	.65
Pinus, Sylvestris, 25 lb tins..lb.	1.90	2.00	2.00	1.90	2.00	1.90
Pumilio, USP, 25 lb tins..lb.	2.85	2.95	2.95	2.85	2.95	2.85
Rose Fr, 8, 16, & 32 oz pkgs..lb.	14.00	17.00	17.00	12.00	15.00	12.00
Bulg, 8, 10 & 32 oz pkgs..lb.	13.00	13.50	13.50	11.50	13.00	10.25
Rosemary, USP, 27½ lb tins..lb.	.....	.56	.56	.47½	.56	.47½
1000 lb drums.....lb.	.....	.50	.50	.42½	.45	.42½
Tech, 25½ lb tins.....lb.	.....	.40	.40	.40	.34	.34
Rue, 1 lb bot.....lb.	3.15	3.25	3.25	3.15	3.25	3.15
SANDALWOOD, E Ind, USP, 100 lb case.....lb.	8.00	8.50	9.00	7.45	7.50	7.05
W Indian (Amayris), 25 lb tins.....lb.	2.85	2.95	2.95	2.25	2.65	2.30
Sassafras, USP, 50 lb cans...lb.	.78	.80	.80	.78	.85	.75
Artificial, 1000 lb drs, 60 lb cans.....lb.	.34	.38	.38	.26	.28	.26
Safrol, cans.....lb	.41	.42	.42	.28	.29	.28
Savin, 50 lb tins.....lb	1.65	1.80	1.90	1.65	1.90	1.70
SPEARMINT, USP, 50 lb tins .....lb	4.05	4.25	4.40	4.05	4.55	4.10
Spruce, 50 lb tins.....lb	1.05	1.10	1.10	1.05	1.10	1.00
Tansy, American, 25 lb tins..lb.	3.75	4.00	4.00	3.75	4.50	3.75
Tar, 50 gal bbls.....lb.	.25	.30	.30	.25	.30	.25
USP, 50 gal bbls.....lb.	.75	1.50	1.50	.75	1.50	.75
Thyme, red, NF, 25 lb tins..lb.	.78	.80	.90	.78	.90	.80
White, NF, 25 lb tins.....lb.	.83	.85	.90	.83	.90	.85
Tech, 110 lb drums.....lb.	.60	.70	.70	.60	.70	.60
Turpentine, USP, rect chys..lb.	.27	.30	.30	.27	.30	.27
Vetivert Bourbon, 10 bot....lb.	6.25	6.50	6.50	6.25	6.75	5.85
Indian, 1 lb bot.....lb.	25.00	38.00	38.00	25.00	38.00	25.00
Java, 1 lb bot.....lb.	15.00	16.00	16.00	15.00	16.00	15.00
Wine, heavy, 1 lb bot.....lb.	1.65	1.75	1.75	1.65	1.75	1.65
WINTERGREEN Gaultheria, true, 25 lb tin.....lb.	8.00	10.00	10.00	8.00	10.00	8.00
Southern, 25 lb tins....lb.	3.75	4.00	4.00	3.75	4.00	3.75
Synthetic see Methyl salicylate.....						
Wormwood, dom, 25 lb tins..lb.	30.00	34.00	35.00	30.00	35.00	14.00
Wormseed, Balt, 25 lb tins...lb.	1.80	1.90	1.90	1.80	3.45	1.90
Ylang Ylang Bourbon, 10 lb tins No. 1.....lb.	9.50	9.75	9.75	9.50	10.50	8.50
10 lb tins No. 2.....lb.	8.25	8.50	8.50	8.25	8.50	6.75
Manila, 1 lb bot.....lb.	30.00	40.00	40.00	30.00	32.00	30.00

Oleoresins

Aspidum, USP, bot and tins..lb.	.....	1.25	1.45	1.25	2.10	1.50
Capsicum, USP, bot and tins.lb.	3.50	4.25	4.25	3.50	4.25	3.50
Cubeb, USP, bot and tins....lb.	3.00	3.25	3.25	3.00	3.25	3.00
Ginger bot and tins.....lb.	2.85	3.35	3.35	2.85	3.35	2.25
Malefern see Aspidum.....						

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{ Monthly Review }

Russian Oil Production Increasing

According to the "Vie Economique des Soviets," March 5, 1929, the pre-war production of essential oils in Russia was small, considering the vast area of the country and the number of different wild plants that might be used for this purpose. Russian average annual production is; Peppermint oil, 10,000 kilos; oil of coriander seed, 2,000 kilos; oil of anise seed, 30,000 kilos; oil of fennel, 15,000 kilos; and pine needle oil, 40,000 kilos.

The task of restoring the extraction of these oils to the pre-war scale was undertaken by the Soviet government with the aid of economic and scientific organizations, such as the Institute of Applied Botany and the Chemical-Pharmaceutical Scientific Institute, and at present the domestic production of essential oils is considerably greater than pre-war; the area allotted to peppermint, for instance, is four or five times greater than pre-war, and that to coriander 10 times. Experiment stations have been established to study plant-culture, seeds, methods of harvesting, etc., as well as the actual manufacture of the oils themselves. Export grading and packing standards have also been adopted.

It is claimed that the quality of Russian peppermint, coriander, and anise oil compares favorably with that produced in other countries. Other oils now produced are calamus oil, juniper oil, oil of zizypus, oil of santonica, etc.

Vanilla Beans Higher on Poor Crop

Vanilla Beans, Bourbon, are quoted in cases at $2.00 to $2.50 per lb. an increase of 15c per lb. Values have hardened representing a primary market shortage. Demand is good and a satisfactory volume of business is being done. The price of South American and Tahiti remain unchanged.

Our Veracruz correspondent reports that the vanilla bean crop in the Sate of Veracruz came very near to being a complete loss, on account of the prolonged drought. In the vanilla district the crop and beans crop was almost a total loss on account of lack of rain. The vanilla vines are very delicate and grown under shade, but were not affected to any great extent.

Until the first week in May it was thought that the vanilla crop would be damaged. On May 8 and 10, there were abundant rains in the vanilla districts, which are said to have saved the 1928-1929 crop, and the rains have continued through the month.

The 1927-28 holdover stock of vanilla is estimated at about 20,000 lbs. of the whole beans. All the cuts have been exported.

The 1928-1929 crop of vanilla is estimated at whole beans, 125,000 lbs., cuts 40,000 lbs., of a good quality. The 1929-30 vanilla crop, if weather conditions are favorable for the coming months, is stated will be about 20% more than the 1928-29 crop.

The 1928-29 crop of Bourbon was 1,000 tons. This was a record for all time. The 1929-30 crop on a far estimate will be about 300 to 550 tons. This represents a considerable decline in tonage but when compared with the 1927-28 crop of 500 tons, which is more nearly an average crop, the possibilities do not fare so badly.

	Current Market		1929 High	1929 Low	1928 High	1928 Low
Orris, bot & tins....lb.	15.00	18.00	18.00	15.00	18.00	15.00
Pepper, black, USP, bot & tin....lb.	.....	9.50	9.50	9.50	.....	.....
Vanilla, bot & tins....lb.	8.00	8.75	8.75	8.00	8.75	8.00

Perfumer's Sundries

Almond Meal, 25 lb cans....lb.	.20	.21	.21	.20	.21	.20
Amber liquid, 400 lb drs....lb.	2.20	2.30	2.30	2.20	2.30	2.20
Ambergris, Black, boxes....oz.	14.00	15.00	15.00	14.00	15.00	14.00
Gray boxes....oz.	32.00	36.00	36.00	32.00	36.00	32.00
BALSAM COPAIBA Para, 80 lb cases....lb.	.....	.33½	.34	.30	.49	.32
South American, USP, 80 lb cases....lb.	.....	.37	.37	.33	.52	.35
Peru, 120 lb cases....lb.	2.00	2.00	2.05	1.75	1.80	1.65
Tolu, 90 lb cases....lb.	1.25	1.30	1.30	1.15	1.20	.95
Benzoin Gum, Siam, boxes...lb.	1.20	1.30	1.30	1.20	1.30	1.20
Castoreum, 1 lb bot....lb.	9.50	10.00	10.00	9.50	10.00	9.50
Chalk, Precip, 1 gt 175 bbls.lb.	.04½	.05	.05	.04½	.05	.04½
Cherry Laurel Water, 24 ltr cby....lb.	4.10	4.60	4.60	4.10	5.60	4.10
Civet, Abyssin, horns....oz.	2.10	3.00	3.00	2.10	3.00	2.10
Labdanum, 5 lb bot....lb.	5.50	6.00	6.00	5.50	6.00	5.50
Lanolin, hydrous, 350 lb bbls....lb.	.15	.16	.16	.15	.16	.15
Anhydrous, 350 lb bbls....lb.	.16	.17	.17	.16	.17	.16
Musk Pods Cabardine, tins..lb.	.....	.....	.....	.....	.....	.....
Musk Tonquin, tins, Pods...oz.	24.00	26.00	26.00	24.00	26.00	24.00
Grains Cabardine, tins....oz.	.....	.....	.....	.....	.....	.....
Tonquin, tins, Grained..oz.	28.00	34.00	34.00	28.00	34.00	28.00
Synthetic See Aromatic Chemical....						
PETROLATUM, snow white, 350 lb bbls....lb.	.12½	.13½	.13¾	.12½	.13¾	.12½
Light Amber, 350 lb bbls. lb.	.12½	.13	.13	.12½	.13	.12½
Rice Starch, 140 lb bags....lb.	.09	.10	.10	.09	.10	.09
Rose Water, 24 ltr cbys.. cby.	5.00	5.50	5.50	5.00	5.50	5.00
Sandalwood, pwd bags....lb.	.22½	.40	.40	.22½	.40	.22½
Saponin, 5 lb tins....lb.	1.15	1.30	1.30	1.15	1.30	1.15
Talc, Italian, 220 lb bags...ton.	60.00	80.00	80.00	60.00	80.00	60.00
French, 220 lb bags....ton.	40.00	45.00	45.00	40.00	45.00	40.00
Aconite Root, USP, bags....lb.	.20	.21	.20	.21	.27	.19
Agar Agar, domestic, No. 1, 200 lb....lb.	1.40	1.45	1.45	1.40	1.40	.96
Almonds Meal....lb.	.15	.30	.30	.15	.30	.15
Aletris Root, bags....lb.	.36	.37	.38	.36	.42	.36
Alkanet Root, bags....lb	.12	.13	.13	.11	.12	.10

Drugs and Spices

ALOES, Cape, 400 lb cases. lb.	.14	.15	.18	.14	.18	.09½
Curacao, 100 lb cases....lb.	.19	.20	.20	.19	.20	.12
Socotrine, Whole, 300 lb cs lb.	.45	.50	.50	.45	.45	.35
Althea Root, bags....lb.	.20	.22	.22	.20	.22	.20
Cut cases....lb.	.33	.40	.40	.33	.40	.33
Angelica Root, bags....lb.	.26	.27	.28	.26	.25	.18
Angostura Bark, bags....lb.	.25	.26	.26	.19	.18	.18
Anise Star case....lb.	.14	.15	.19	.14	.26½	.14
Spanish, bags....lb.	.17	.18	.19	.17	.20	.13
ARABIC GUM, White, No. 1, 100 lb bags....lb.	.28	.29	.29	.22	.27½	.22
Seconds, 200 lb bags....lb.	.25	.26	.26	.16	.21	.16
Sorts, Amber, 220 lb bags..lb.	.20	.23	.23	.11	.11½	.10½
Powd, USP, 300 lb bbls....lb.	.23	.24	.25	.17½	.21	.17½
Areca Nuts, 100 lb bbls....lb.	.10	.11	.11	.10	.12½	.10
Powd, 100 lb bbls....lb.	.14	.15	.15	.14	.21	.15
Arnica Flowers, bales....lb.	.85	.90	1.00	.80	1.50	.95
Root, bags....lb.	.35	.36	.36	.35	.45	.35
Arrowroot, St. Vincent, powd bbls....lb.	.10	.10½	.10½	.10	.10½	.10
Asafoetida, 250 lb cases....lb.	.23	.26	.28	.23	.31	.25
Powd, 50 lb boxes....lb.	.50	.54	.54	.50	.68	.50
Balm Gilead Buds, bags....lb.	.35	.40	.40	.35	.40	.31
Balmony Herbs, bales....lb.	.23	.25	.25	.18	.23	.18
Barberry Bark, of root, bags lb.	.19	.20	.20	.19	.32	.19
Bayberry Bark, bales....lb.	.10	.11	.13	.10	.18	.12
Wax bbls....lb.	.29	.32	.32	.29	.32	.29
BELLADONNA LEAVES, bales....lb.	.17	.19	.20	.17	.23	.17
Root, bags....lb.	.20	.21	.21	.20	.21	.20
Bees Wax, White, cases....lb.	.55	.60	.60	.55	.60	.55
Yellow refined cases....lb.	.41	.42	.42	.41	.42	.41
Berberis Aquafolium Root, bags....lb.	.11	.12	.12	.10	.13	.10
Beth Root, bags....lb.	.17	.18	.18	.17	.20	.17
Black Indian Hemp Root, 100 lb bags....lb.	.18	.19	.19	.18	.20	.18
Blood Root, bags....lb.	.18	.18½	.18½	.17½	.35	.21
Blueflag Root, bags....lb.	.19	.20	.20	.19	.27	.17
Boldo Leaves, bales....lb.	.15	.17	.17	.15	.17	.15
Boneset Herb, bales....lb.	.11	.12	.12	.10	.10	.07½
Borage Flowers, bales....lb.	.15	.16	.15	.14½	.17	.14½
Broomtop Herb Cut, bales..lb.	.10	.11	.11	.10	.11	.10
Bryonia Root, bags....lb.	.11	.12	.12	.11	.12	.10½
BUCHU LEAVES Short, 250 lb. bales....lb.	.37	.38	.40	.37	.55	.42
Long bales....lb.	.75	.80	.80	.75	.80	.75
Buckbean Leaves, bales....lb.	.09	.10	.10	.09	.15	.13
Buckthorn Bark, bags....lb.	.05	.05½	.05½	.05	.05½	.05
Berries, bags....lb.	.45	.50	.50	.45	.50	.45
Burdock Root, bags....lb.	.13	.14	.17	.13	.17	.11
Seed bags....lb.	.65	.....	.65	.65	...	.65
Burgundy Pitch, 110 stand gross for net....lb.	.08	.09	.09	.08	.09	.08
Imported....lb.	.12	.13	.13	.12	.13	.12
Calabar Beans, bags....lb	.25	.26	.26	.22	.27	.22

85 YEARS

Many buyers find it practical nowadays to turn to a dependable source of supply, with a feeling of confidence that they will be fully informed as developments become available in the complex markets governing Crude Drug prices.

Uniform Quality

Aloes, Cape
Asafoetida
Belladonna Leaves
Belladonna Root
Buchu Leaves
Chamomile Flowers
Dandelion Root
Digitalis Leaves
Doggrass Root
Fennel Seed
Foenugreek Seed
Fumigating Pastilles
Gentian Root
Henbane Leaves
Henna Leaves
Insect Flowers
Juniper Berries
Lavender Flowers
Licorice Cuttings
Licorice Root 1¼lb. & 5 lb. bundles
Orris Root, Florentine
Olive Oil, Italian
Quassia
Rhubarb Root
Sage Leaves
Soap Castile
Soap Bark, Cut
Squill Root

Favorable Price

85 YEARS

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{ Monthly Review }

Essential Oil Imports Increase

Essential oil imports into the United States show a notable increase. The value of eight of the ten items recorded under the general classification of essential oils was greater for the first quarter of 1929 than for that of the preceding year.

	Jan.-April 1928		Jan.-April 1929	
	Pounds	Value	Pounds	Value
Cassia and cinnamon	109,090	$122,215	153,040	$214,590
Geranium	67,999	187,678	20,467	83,110
Attar of roses	11,702	110,499	7,327	67,006
Bergamot	44,982	226,284	41,091	195,369
Citronella & lemon grass	422,442	169,762	489,912	216,122
Lavender and spike lavender	74,348	220,328	110,915	314,711
Lemon	258,180	481,771	183,300	603,856
Orange	95,063	227,395	96,715	464,212
Sandalwood	1,928	4,346	13,025	68,736
All other essential and distilled oils	933,627	480,577	1,882,516	748,303
Total	2,019,361	$2,230,855	2,998,368	$3,006,015

The Camphor Oil Situation

The Formosan Governor General announced in October, 1928, that the government monopoly would reduce its prices to producers of crude camphor oil. As a consequence, there was a sharp drop in production and there had also been a more or less gradual decline prior to that time. The production of Formosan camphor oil in 1926 totaled 11,498, 233 kin and in 1927, 10,684,854 kin. (1 kin equals 1⅓ pounds). The Monopoly Bureau advises that exports to foreign countries from both Japan proper and Taiwan of white and brown camphor oil totaled 2,655,200 kin in 1926; 2,248,800 kin in 1927; and 3,523,300 kin in 1928.

It is stated that white camphor oil is now being used in Japan in the manufacture of paint, varnish, medicinal soaps, and various insecticides and also explosives. Brown oil is used in the manufacture of soap, artificial perfumes, artificial orange oil, etc. There are several large consumers of these and there is a very striking increase in domestic consumption. "Commercial Attache Halleck A. Butts, Tokyo."

Beeswax and Guiac Imports Up

Exports of beeswax and gum guiac from the Dominican Republic to the United States during the past two years were as follows:

	1927		1928	
	Pounds	Value	Pounds	Value
Beeswax	181,069	$62,144	204,309	$72,361
Gum guiac	10,105	2,606	14,270	3,858

Balsam exports from El Salvador during 1928 amounted to 51,000 kilos, compared with 47,000 kilos in 1927.

Imports of crude balsams into the United States for the first quarter of 1929 amounted to 116,403 pounds, valued at $65,000, against 113,000 pounds, valued at $56,000, for a similar period in the preceding year.

Brazil continues to be the source of from 40 to 55 per cent of the quantity, followed by Colombia with 16 to 25 per cent. and Salvador with 10 to 20 per cent.

Cinnamon Imports Lower

Cinnamon oil exports to the United States showed another large decrease in 1928. The exports of this product have rapidly and continually decreased for the past several years, having dropped from 93,552 pounds in 1925 to 8,051 pounds valued at $8,500, in 1928. The 1927 exports to the United States were 25,100 pounds, valued at $29,000.

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Calamus Root, blchd cases	lb. .45	.47	.52	.45	.50	.35
Unbleached, bags	lb. .06½	.07	.07	.06½	.07	.06½
Calendula Petals, imp bales	lb. 1.40	1.45	1.50	1.40	1.75	.85
Calisaya Bark, bales	lb. .21	.22	.22	.21	.23	.20
Powdered, bbls	lb. .26	.27	.27	.26	.32	.18
Canary Seed, South America, bags	lb. .06½	.07	.07½	.05	.05½	.04½
Dutch, bags	lb. .05½	.06½	.06½	.05½	.06½	.05½
Candelilla Wax, bags	lb. .27	.28	.28	.27	.28	.27
Cannella Alba Bark, bales	lb. .30	.31	.31	.28	.32	.28
Cannabis, U.S.P.	lb .22	.27	.33	.22	.....	.....
Cantharides, Chinese, cases	lb. .42	.47	.55	.42	.72	.50
Powdered, boxes	lb. .65	.70	.80	.65	.88	.75
Russian, cases	lb. .50	.51	.55	.50	.70	.54
Powdered, boxes	lb. .65	.70	.75	.65	.80	.68
Caraway Seed, African, bags	lb. .05	.06	.06	.05	.12	.05
Dutch, 11 lb bags	lb. .10½	.11	.11	.09½	.12	.09½
Cardamon bleached, cases	lb. 1.50	1.60	1.75	1.50	2.00	1.50
Decorticated, cases	lb. 1.45	1.55	1.60	1.45	1.60	1.25
Cascara Amarga, 150 lb bbls	lb. Nom.	.....	.....	.....	.90	.90
So called bales	lb. .60	.85	.85	.60	.85	.60
CASCARA SAGRADA, 1926 bark	lb. .15	.16	.16	.15	.16	.15
1927 bark	lb. .14	.15	.15	.14	.15	.14
1928 bark	lb. .13½	.14½	.14½	.13	.14	.13
Cascarilla Bark, quills, bales	lb. .90	1.00	1.00	.90	1.00	.90
Siftings, bbls	lb. .65	.....	.65	.65	.65	.65
Cassia Batavia No. 1 bbls	lb. .13½	.13½	.15	.13½	.16	.13½
Shortstick, bales	lb. .11½	.11½	.12½	.11	.13	.11
Batavia No. 3, bales	lb. .09½	.10	.11	.09½	.11	.09½
China Select Rolls, cases	lb. .08½	.08½	.09	.08½	.13½	.09
Broken, bales	lb. .09½	.10	.10	.09½	.10	.08½
Saigon, thin	lb. .30	.31	.39	.28	.39	.22
Buds, cases	lb. .16½	.17	.20	.16½	.19	.18½
Fistula, baskets	lb. .11	.13	.13	.11	.24	.11
Catnip, Herb, bales	lb. .19	.20	.23	.18	.23	.19
Celery Seed, bales	lb. .16½	.17½	.19	.16½	.21	.19
Ceresin Wax, White, bags	lb. .15	.20	.20	.15	.20	.15
Yellow 200 lb. bags	lb. .11	.14	.14	.11	.14	.11
Imp. 100 lb. bags	lb. .25	.38	.38	.25	.38	.25
CHAMOMILE FLOWERS Roman, bales	lb. .40	.45	.50	.40	.50	.18
Hungarian, cases	lb. .21	.22	.26	.23	.24	.15
Charcoal Willow, powd, bbls	lb. .06	.06½	.06	.06	.06½	.06
Wood, powd, bbls	lb. .04	.05	.05	.04	.05	.04
Chestnut Bark	lb. .07	.08	.08	.07	.....	.....
Leaves bales	lb. .05	.05½	.05½	.05	.06½	.05
Chicle Gum, lb bbls	lb. .58	.75	.75	.58	.75	.58
Chiretta, bales	lb. .28	.30	.30	.28	.30	.25
Cinnamon, Ceylon, No. 1, bales	lb. .47	.48	.62	.47	.62	.60
No. 2 bales bend	lb. .45	.46	.51	.45	.61	.55
No. 3 bales	lb. .55½	.56	.56	.55½	.56	.55½
Clover Tops, Red, bags	lb. .10	.11	.14	.10	.12	.10
Cloves Zanzibar, 135 lb bbl	lb. .36½	.37	.38	.35	.38	.18
Cochineal, Black	lb. .69	.....	.69	.69	.69	.69
Silver	lb. .85	.....	.85	.85	.85	.85
Cohosh Root, Black, bags	lb. .07½	.08½	.09	.07½	.09	.07
Blue, bags	lb. .11	.12	.12	.11	.12	.09
Colchicum Root, bags	lb. .08	.09	.09	.07	.07	.06
Seed, bags	lb. .65	.70	.85	.65	.70	.25
COLUMBO ROOT, bags	lb. .15	.16	.20	.15	.20	.05
Colocynth Pulp, bales	lb. .35	.38	.45	.35	.110	.42
Coltsfoot Leaves, bags	lb. .08	.09	.09	.08	.12	.08
Comfrey Root, bags	lb. .13	.....	.14	.13	.14	.14
Condurango Bark, bags	lb. .15	.16	.17	.15	.16	.13
Coriander Seed, Morocco, bags	lb. .03½	.04	.06	.03½	.13	.05
Bleached, bags	lb. .11	.11½	.11½	.11	.19	.11
Corn Silk, bales	lb. .05½	.06½	.06½	.05½	.06½	.05
Cotton Root Bark, bales	lb.	.12	.13	.12	.15	.12
Cowhage, 1 oz tins	lb. 1.00	.....	1.00	1.00	1.00	.95
Cramp Bark so called bales	lb. .06½	.07	.08	.06	.08	.05½
True, bags	lb. .35	.38	.48	.35	.55	.34
Cranesbill Root, bags	lb. .10	.....	.10	.10	.12	.10
CUBEB BERRIES, XX bags	lb. .48	.53	.53	.48	.53	.48
Powdered, boxes	lb. .50	.55	.55	.50	.55	.50
Culvers Root, bags	lb. .18	.19	.20	.18	.22	.18
Cumin Seed, Malta, bags	lb. .12	.13	.13	.12	.15	.12
Morocco, bags	lb. .12	.13	.13	.12	.15	.12
Cuttlefish, Bone Trieste, Straps	lb. .14	.14	.14	.14	.14	.13
French, boxes	lb. .13	.16	.16	.12½	.15	.12½
Powdered, bbls	lb. .09	.10	.10	.09	.10	.09
Broken, bales	lb. .05	.....	.05	.05	.05	.05
Damiana Leaves, bales	lb. .17	.18	.18	.16	.30	.16
Dandelion Root, Imp. bags	lb. .23	.27	.29	.19	.20	.14
Deer Tongue Leaves, bales	lb. .11	.13	.13	.11	.18	.10
Digitalis Leaves, bales	lb. .42	.52	.70	.42	.70	.30
Dogwood Bark, Jamaica bags	lb. .09	.10	.11	.09	.10½	.09
American bales	lb. .06½	.....	.06½	.06½	.06½	.06½
Doggrass Root, USP, cut bags	lb. .10	.11	.12	.10	.13	.10½
Dragons Blood Mass, cases	lb. .65	.70	.70	.65	.70	.65
Reeds, boxes	lb. .95	.....	.95	.95	.95	.95
Echinacea Root, bags	lb. .24	.26	.28	.24	.33	.26
Elcampane Root, bags	lb. .08	.09	.09	.08	.09	.08
Elder Flowers, bags	lb. .30	.31	.31	.22	.25	.19
Elemi Gum, 85 lb cases	lb. .26	.28	.28	.26	.28	.20
Elm Bark, bundles	lb. .27	.28	.28	.25	.27	.22
Grinding bags	lb. .13½	.14	.14	.13½	.14	.13½
Powdered, bbls	lb. .19	.22	.22	.19	.22	.19
Ephedra Vulgaris, bales	lb. .12	.13	.16	.12	.25	.15
ERGOT, 150-200 lb bags	lb. .65	.75	.95	.65	2.50	.80
Eucalyptus Leaves, bales	lb. .09	.10	.11	.07½	.10	.06½
Euphorbia Pilulifera, Herb, bags	lb. .09	.10	.11	.09	.10	.07½

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{ Monthly Review }

Gum Arabic Continues to Climb

Gum Arabic is again higher, quotations being made at 20 to 23 cents per pound, with every indication that the next six months will see still higher figures for this commodity.

Boxall & Co., Khartoun, in their report dealing with Gum Arabic during the period of April 1st to the 30th, state that arrivals in Kordofan Stations (including Tendelti) amounted to 1,671 tons as against 2,530 tons last year— a shortage of 859 tons or 34%. This year's April arrivals are the lowest recorded for that month over the series of bumper crops we have had since 1923.

The shortage in Kordofan and Tendelti arrivals this season to date, as against last season which was a record early crop, totals about 4,060 tons. If to this is added the shortage in inferior Hashab estimated at about 2,000 tons the total shortage in Hashab Gum as against last year would amount up to end of April to about 6,000 tons.

The El Obeid market gradually rose until the 11th when the total increase attained was 13/ per cwt. On the 13th, however, i. e. the following market day, prices fell to the extent of 1/6 but were again on the upward move until the 25th when the increase totalled 2/3; since then they have remained firm at that level. The total net increase during the month amounts, therefore, to 10/6 per cwt.

It will be seen from the accompanying figures that to the end of March exports of Hashab are down 1,100 tons. Bleached exports are about the same whilst Talba is up 300 tons against the first three months of last year. The net difference on all qualities is about 800 tons down.

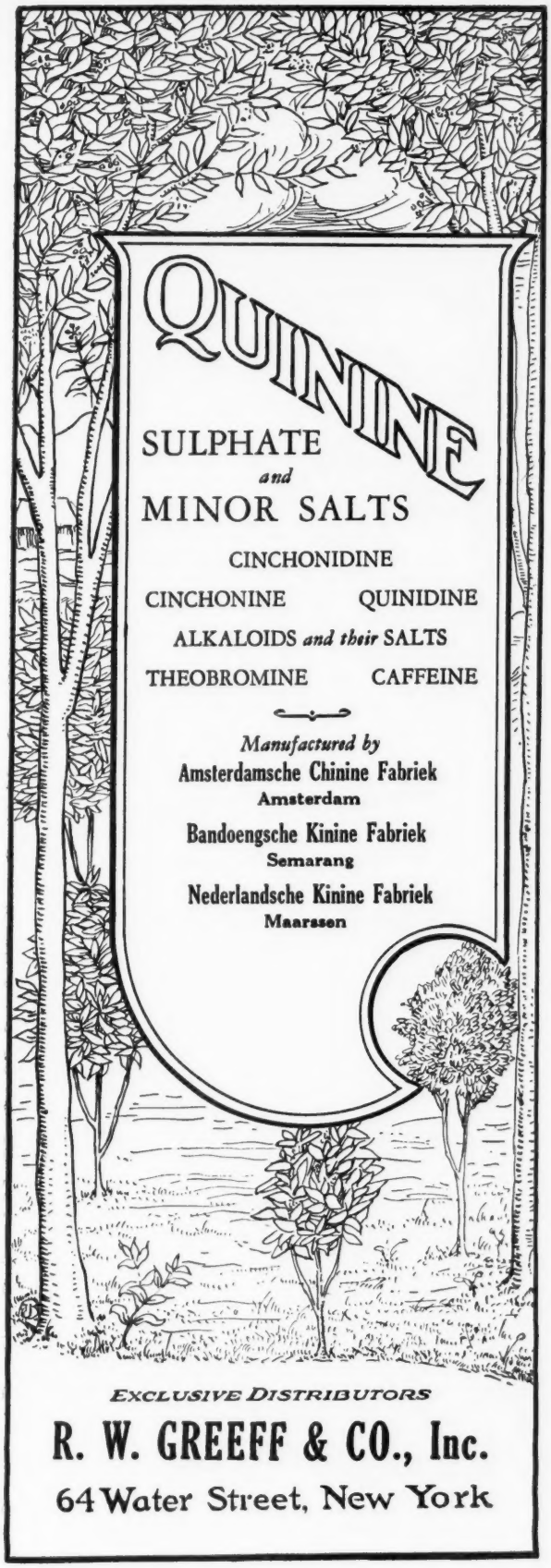
The situation entirely changed as regards possibilities of a large crop when with the beginning of April and normally hot weather the arrivals did not increase but even declined as against those of March. Many reasons have been suggested, amongst others the low prices of previous years' discouraging collection and camel transport being diverted from gum to the transport of cotton from the Nuba Mountains, etc., but whilst these might have had some effect we are convinced it is due to the exceptional dampness of the climate.

Destination	*1928*			*1929*		
	Jan.-Feb.	*Mar.*	*Total*	*Jan.-Feb.*	*Mar.*	*Total*
Great Britain	916	825	1,741	918	551	1,469
U. S. A.	1,156	441	1,597	742	805	1,547
France	516	616	1,132	433	459	892
France	516	616	1,132	433	459	892
Germany	702	396	1,098	538	565	1,103
Italy	206	217	423	286	135	421
Belgium	247	271	518	199	215	414
Japan	274	108	382	50	174	224
Spain	65	71	136	111	35	146
Holland	68	94	162	85	55	140
Denmark	13	5	18	13	—	13
Norway and Sweden	94	70	164	55	7	62
Egypt	13	17	30	28	20	48
Australia and New Zealand	112	56	168	86	76	162
China	4	19	23	63	41	104
Canada	2	15	17	—	10	10
Argentine	17	30	47	5	15	20
Brazil	1	17	18	7	5	12
Uruguay	1	10	11	—	—	—
Finland	—	2	2	5	22	27
British India	25	10	35	41	43	84
Other countries in America	—	—	—	5	—	5
Other countries	12	5	17	6	22	28
Total Tons	4,444	3,295	7,739	3,676	3,255	6,931

	Hashab	*Bleached*	*Talha*	*Total*
January-March 1928: Tons	7,149	39	551	7,739
January-March 1929: Tons	6,040	32	859	6,931

Sarsparilla Root declines somewhat to 28c. The higher price of last month represented a temporary scarcity. Supplies are now more abundant and a more normal price is reflected.

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Euphorbium Gum, cases....lb.	.14	.20	.14	.20	.14
Fennel Seed, French, bags...lb.	.16	.17	.18½	.16	.25 .16½
German bags.....lb.	.20	.22	.27	.20	.32 .20
Foenugreek Seed, 200 lb bags .....lb.	.05	.05½	.05½	.05	.06 .04½
Fish Berries, 100-125 lb bag..lb.	.06	.07½	.07½	.06	.07½ .06
Flax Seed, Whole 182 lb bbls..lb.	14.00	14.75	14.75	14.00	14.75 14.00
Ground, 180 lb bbls.....lb.	.08	.08½	.08½	.08	.08½ .08
Flea Seeds Black bags.....lb.	.20	.21	.24	.20	.27 .16
Fringe Tree Bark or Root bags .....lb.	.21	.22	.24	.21	.27 .22½
Fumigating Pastiles, boxes..lb.	.30	.35	.35	.30	.35 .30
Galangal Root, bags.....lb.	.14	.15	.15	.14	.15 .11
Galbanum Gum, cans.....lb.	1.15	1.25	1.25	1.15	1.25 1.00
Gamboge Gum, 100 lb cases..lb.	1.15	1.20	1.25	1.15	1.35 1.10
Powdered, cases.....lb.	1.25	1.35	1.40	1.25	1.50 1.20
Gelsemium Root, bags.....lb.	.09	.10	.12	.09	.13 .09
GENTIAN ROOT, bags....lb.	.09½	.10½	.11	.09½	.11 .09
Ground bbls, boxes.....lb.	.13	.14	.14	.13	.14 .11
Powdered, bbls, boxes....lb.	.13	.14	.14	.13	.14 .12½
Ginger, African, bags.....lb.	.15	.15½	.15½	.13	.14½ .10¾
Jamaica Grinding bags....lb.	.18	.18½	.20	.18	.23 .17
Cochin ABC & Lemon, bags .....lb.	.17	.18	.18	.17	.20 .16
Ginseng Root, cultivated cs..lb.	8.00	10.00	10.00	8.00	10.00 8.00
Wild Southern, cases....lb.	.....	16.00	16.00	16.00	16.00 8.50
Golden Seal Root, bags.....lb.	3.45	3.55	3.80	3.20	4.50 3.90
Powdered, boxes.....lb.	3.95	4.05	4.35	3.95	5.25 4.60
Herb, barrels.....lb.	1.25	1.30	1.30	1.25	1.30 1.25
Grains of Paradise, bags....lb.	.40	.50	.85	.40	.60 .40
Grindelia Robusta, Herb, bale .....lb.	.10	.11	.12	.10	.12 .08½
Guaiac Gum, 150 lb cases....lb.	.33	.34	.38	.33	.40 .33
Strained 75 lb cases...lb.	.70	.75	.75	.70	.75 .70
Guarana, tin cases.....lb.	2.75	3.00	3.00	2.50	2.75 1.65
Hellebore Root, Black, bbls. lb.	.05½	.06	.06	.05½	.06 .05½
White, 250 lb bbls.....lb.	.07¾	.08½	.08½	.07¾	.08½ .07¾
Powdered.....lb.	.11	.12	.12	.11	.14 .11
Helonias Root, bags.....lb.	.62	.64	.72	.62	.80 .67
Hemp Seed, bags.....lb.	.05	.06	.06	.05	.07 .03½
Henbane Leaves, USP, bales..lb.	.18	.19	.20	.18	.23 .18
HENNA LEAVES, bales....lb.	.12	.13	.13	.12½	.13 .12½
Powdered.....lb.	.15	.16	.17	.15	.17 .16
Hops, bales.....lb.	.....	.32	.32	.32	.32 .25½
Horehound, Herb, bales.....lb.	.08	.09	.09	.08	.09 .07
Hydrangea Root, bales.....lb.	.....	.09	.09	.08	.09 .08
Insect Flowers.....lb.	.35	.37	.37	.35	.35 .22
Powdered, Pure, 200 lb bb .....lb.	.38	.40	.46	.38	.45 .32
IPECAC ROOT, Carteagna, bags.....lb.	2.95	3.20	3.35	2.70	3.30 2.35
Powdered, 220 lb bbls...lb.	3.25	3.40	3.80	3.20	3.65 3.15
Rio Whole, bags.....lb.	3.00	3.20	3.20	2.85	3.40 2.80
Powdered, 110 lb bbls...lb.	3.40	3.50	3.50	3.40	3.50 3.25
Isinglass, American, 130 lb cases .....lb.	.95	1.00	1.00	.95	1.00 .95
Russian (Beluga), boxes...lb.	4.50	.....	4.50	4.50	4.50 4.50
Jaborandi Leaves, bales.....lb.	.12	.12½	.12	.11½	.13 .13
Jalap Root, Whole, 150 lb bag.....lb.	.24	.27	.37	.24	.21 .16
USP, Powd, 250 lb bbls....lb.	.29	.32	.42	.29	.26 .22
Japan Wax 24 lb cases.....lb.	.18½	.19	.19	.18½	.19 .18½
JUNIPER BERRIES, 125 lb bags.....lb.	.07½	.08	.09	.05	.07½ .05
Kamala, boxes.....lb.	1.15	1.20	1.40	.95	1.00 .85
Karaya Gum, Powdered, bbls .....lb.	.12	.20	.20	.12	.13 .12
Kava Kava Root, bags.....lb.	.14	.....	.15	.14	.16 .15
Kino Gum, Black, cases....lb.	.50	.55	.55	.50	.55 .50
Kola Nuts, 150 lb bags.....lb.	.13	.14	.15	.13	.15 .09
Lady Slipper Root, bags....lb.	.90	1.00	1.30	.85	1.75 .78
Larkspur Seed, bags.....lb.	.40	.45	.45	.40	.45 .30
Laurel Berries, bags.....lb.	.08	.09	.09	.08	.09 .08
Leaves, Greek, bags.....lb.	.05½	.06	.06	.05	.07 .04½
Italian, bales.....lb.	.03½	.04	.04	.03½	.05 .03½
Lavender Flowers, Ordinary..lb.	.32	.35	.35	.32	.35 .30
Selected.....lb.	.42	.43	.45	.43	.55 .40
Lemon Peel, bags.....lb.	.09½	.10½	.13	.10	.10 .09½
LICORICE ROOT, Whole bbls .....lb.	.12	.18	.18	.12	.18 .12
Spanish Natural bales....lb.	.05½	.07	.07	.05½	.07 .05½
Powdered, bbls.....lb.	.09	.10	.10	.09	.10 .09
Selected 2 & 5 lb bdls....lb.	.13	.15	.15	.12½	.16 .12½
Cutting, 125 lb bags....ln.	.06½	.07	.07	.06½	.07 .06½
Turkish, 150 lb bales....lb.	.05	.....	.05	.05	.05 .05
Linden Flowers with leaves, bales.....lb.	.24	.25	.27	.24	.33 .29
Without leaves, bales...lb.	.30	.31	.32	.30	.36 .27
Liverwort Leaves, bales....lb.	.18	.19	.20	.18	.20 .16
Lobelia, Herb, bales.....lb.	.13	.14	.16	.13	.20 .15
Seed, bags.....lb.	.45	.50	.65	.45	.75 .65
Lovage Root, Imp., bags....lb.	.35	.37	.37	.25	.27 .25
Lupulin N. F., tins.....lb.	1.75	.....	1.75	1.75	1.75 1.75
Lycopodium, 88 lb. cases....lb.	.73	.75	.85	.73	1.00 .70
MACE SIAUW, No. 1, cases .....lb.	.85	.86	.86	.82	.98 .88
Banda No. 1, cases.....lb.	.95	.96	.98	.95	1.00 .94
Batavia No. 2, cases.....lb.	.54	.55	.58	.54	.68 .56
Malva Flowers, Blue, bales..lb.	.40	.42	.52	.40	.70 .45
Black, bales.....lb.	.40	.55	.60	.40	.60 .45
Leaves, bales.....lb.	.14	.15	.15	.14	.15 .14
Manaca Root, bales.....lb.	.22	.....	.22	.22	.22 .22
Manna, Large Flake, cases...lb.	.80	.82	.82	.75	.80 .65
Small Flake, cakes.....lb.	.52	.55	.60	.52	.60 .50
Sorts, cases.....lb.	.45	.50	.50	.45	.50 .45
Mandrake Root, bags.....lb.	.12	.13	.14	.12	.18 .13
Marjoram, Herb					
French, No. 1 bales.....lb.	.16½	.17½	.19	.16½	.18½ .13½
German, bales.....lb.	.22	.22½	.23	.22	.18½ .12
Mastic Gum, 120 lb cans....lb.	.65	.70	.70	.65	.70 .60



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Monthly Review

Senna in Greater Demand

The fourth most important export through the port of Cairo is senna. (No senna was invoiced during 1928 for the United States at any other Egyptian Port). Declared shipments for 1927 and 1928 were 1,111,600 pounds, valued at $71,000, and 1,171,750 pounds, valued at $85,550 respectively. Since 1925, the quantity of senna exported annually has remained rather consistently in the neighborhood of a million pounds while the value has been decreasing steadily. This decrease in price is laid to the keen competition afforded in the world markets by the Indian senna (acoutifelia), which, although of an inferior quality to the Egyptian product (angustifelia) can greatly undersell the latter. During 1928, however, prices for senna averaged approximately 7 cents a pound, an increase of nearly a cent per pound over 1927. This fact largely explains the increase in the value of declared exports for the past year. The United States is the chief purchaser and the Anglo-Egyptian Sudan the chief supplier. "Vice Consul J. L. Brent, Cairo."

Imports of senna for the last two years and the first quarter of 1929 were as follows: 1927—2,558,000 pounds, valued at $179,000; 1928—2,939,000 pounds, with a value of $195,000; 1929, first three months 601,000 pounds, value $42,600.

Papain Imports Greater

The United States is importing papain in ever-increasing quantities. Exports to the United States have gradually increased from 50,208 pounds in 1925 to 113,776 pounds, valued at $326,000, in 1928. During 1927, the United States took 67,500 pounds, having a value of $207,000. "Consul Stillman W. Eels, Colombo."

Chamomile Flowers have been in little demand at present. A price decline of 5c per pound has been noted in spite of the fact that difficulty in securing release of some merchandise by the inspectors acting for the Department of Agriculture has been experienced. Some goods were released, however, and together with the lack of interest has caused a downward fluctuation.

Kamala is easier at $1.15. Shipments from abroad have been larger, accounting for a decline of about 15c per pound.

Arnica Flowers are in good supply as the new crop is now coming in with good prospects. Prices are quoted at 85 to 90c with a fair demand at these levels.

Pimento is being quoted at 27½c and 28c. Demand is fair but in small lots. As this product is under close control and prices subject to fluctuation at any time, some dealers recommend covering requirements, at least partially, even at present values.

Nutmegs are in moderate demand, 110's selling at 28c and 29c as to quantity. There is apparent underproduction in the West Indies and strong reluctance to import East Indies sorts because of the poorish quality and the danger of rejection by U. S. inspection.

Celery is somewhat higher in France, where damage by the cold is found to be rather serious. Higher prices have been encountered and a reluctance on the part of those having stocks to part with them at present figures

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Matico Leaves, bales lb.	.30	.41	.32	.30	.45	.31
Mezereon Bark, bags lb.	.20	.25	.25	.20	.35	.20
Millet Seed, Yellow, bags lb.	.03½	.04½	.04½	.03½	.04½	.03½
Montan Wax, Crude, bags lb.	.06½	.07	.07	.06½	.07	.06½
Bleached, bags lb.	.25	.28	.28	.25	.28	.25
Moss, Iceland, bales lb.	.10	.12	.11	.10	.12	.07½
Irish, Bleached, bales lb.	.13	.16	.18	.13	.18	.11
Mullein Flowers, tins lb.	2.00	.....	2.00	2.00	2.25	2.00
Leaves, bales lb.	.07½	.08	.08	.07½	.08	.07½
Musk Root, Russian, bags lb.	.09	.10	.12	.09	.25	.11½
Myrrh Gum, 200 lb, cases lb.	.38	.41	.65	.41	1.10	.55
Nutgalls, Chinese, bags lb.	.22	.....	.22	.22	.22	.22
Aleppy, bags lb.	.21	.....	.21	.21	.25	.21
Powdered, bags lb.	.23	.....	.23	.23	.23	.23
Nutmegs, 110's cases lb.	.28	.29	.31½	.28	.38	.30
75's & 80's cases lb.	.38	.39	.42	.38	.50	.42
Grinding, bags lb	.24	.25	.25	.24	.29	.26½
NUX-VOMICA Buttons, bag lb.	.05	.06	.06	.05	.05½	.04
Powdered, 200 lb bbls lb.	.08	.08½	.08½	.08	.08½	.08
Oak Bark, bags lb.	.05	.05½	.05½	.05	.06½	.05
Olibanum Gum, 280 lb cases Siftings lb.	.13½	.15	.15	.13	.11½	.13
Tears, No. 1 Extra lb.	.27	.28	.28	.27	.30	.26
No. 2 lb.	.20	.22	.22	.19	.20	.18
No. 3 lb.	.16	.18	.18	.15	.17	.14
Opium Gum, USP, cases lb.	12.00	13.00	13.00	12.00	13.00	12.00
Granular, cans lb.	13.00	14.00	14.00	13.00	14.00	13.00
Powdered, USP, cans lb.	13.00	14.00	14.00	13.00	14.00	13.00
Orange Flowers, cases lb.	.25	.....	.25	.25	.25	.25
Peel, Bitter, bags lb.	.11	.12	.12	.10	.11	.10
Sweet bags, lb.	.12	.13	.14	.11	.08½	.08½
ORRIS ROOT, Flor. bid. bags lb.	.26	.27	.27	.17	.14½	.10
Powdered, 200 lb bbls lb.	.27	.28	.28	.21	.17	.13
Verona, bags lb.	.23	.24	.25	.16	.13	.09
Powdered, 200 lb bbls lb.	.27	.28	.29	.20	.14	.11
Fingers, boxes lb.	1.15	1.20	1.20	.90	.90	.80
Ozokerite Wax, Brown, Hard lb.	.....	.....	.....	.....	.....	.....
Bags lb.	.24	.25	.25	.24	.25	.24
Green, Hard, bags lb.	.30	.31	.31	.30	.31	.30
Yellow, Refined, bags lb.	.37	.....	.37	.37	.37	.37
Papain, Crude, 150 lb cases lb.	3.45	3.50	3.50	3.45	4.90	3.45
Pure, Powdered, 10 lb bot. lb.	3.50	3.55	3.55	3.50	4.35	3.50
Paprika, bags lb.	.29½	.30	.33	.29	.33	.23
Pareira Brava Root, bags lb.	.13	.14	.14	.11	.12	.11
Passion Flower, bales lb	.70	.75	.75	.14	.15	.06½
Patchouli Leaves, bales lb.	.22	.23	.23	.22	.29	.22
Pennyroyal, Herb, 100 lb bags lb.	.07	.....	.07	.07	.07	.07
Leaves, 100 lb bags lb.	.14	.16	.16	.14	.16	.14
PEPPERMINT LEAVES, Imp bales lb.	.43	.45	.45	.43	.50	.43
Domestic, bales lb.	.30	.31	.31	.24	.40	.24
Pichi Leaves, bags lb.	.13	.14	.16	.13	.14	.13
Pimento Select, bags lb.	.27½	.30½	.30½	.22	.23	.16½
Pink Root, True, bags lb.	.55	.57	.60	.55	.75	.58
Pleurisy Root, bags lb.	.21	.22	.28	.21	.28	.22
Poke Berries, bags lb.	.....	.30	.30	.20	.30	.20
Root, 200 lb bales lb.	.08	.08½	.08½	.07½	.10	.07½
Pomegrant Bark of Root, bags lb.	.30	.35	.35	.20	.44	.20
Bark of Fruit, bags lb.	.25	.30	.30	.25	.30	.30
Bark of Tree, bags lb.	.18	.22	.22	.15	.21	.15
POPPY FLOWERS, Red, bags lb.	.55	.60	.60	.50	.65	.50
Heads, bags lb.	.50	.....	.50	.50	.50	.08
Prickly Ash Bark lb.	.14	.17	.17	.14	.17	.14
Southern bags lb.	.13½	.14	.14	.13½	.16	.13½
Northern, bags lb.	.16	.17	.18	.16	.25	.16
Berries, bags lb.	.20	.21	.21	.19	.22	.17½
Prince's Pine, bales lb.	.28	.30	.30	.15	.17	.14
Pulsatilla, Herb, bags lb.	.12	.13	.14	.12	.14	.11
Pumpkin Seed, bags lb.	.14	.15	.15	.14	.25	.14
Quassia Chips, bags lb.	.06½	.....	.06½	.06½	.06½	.06½
Quebracho, bulk, 125 lb. bbl. lb.	.30	.31	.31	.29	.36	.29
Root, bags lb.	.....	.07	.07	.07	.08	.07
Quince Seed, bags lb.	.70	.80	.80	.70	.80	.60
Cape, bags lb	1.10	1.25	1.25	1.10	1.50	.95
Rape Seed, South American, bags lb.	.05½	.06	.06	.05½	.06½	.04½
Dutch, bags lb.	.06½	.06½	.07½	.06	.07½	.05½
Japanese, small bags lb.	.06	.06½	.07	.06	.07	.06½
Raspberries, Dried, bbls lb.	.50	.60	.60	.45	.85	.45
Red Saunders, bags lb.	.08	.....	.08	.08	.08	.08
Rhatany Root, bags lb.	.11	.12	.12	.11	.12	.11
Rhubarb Root, HD, cases lb.	.36	.37	.41	.36	.45	.38
Powdered, bbls lb	.41	.42	.46	.41	.53	.43
Rosemary Leaves, bales lb.	.04½	.05	.05	.04½	.06	.04½
Flowers, cases, bales lb.	.25	.30	.30	.25	.30	.25
Rose Petals, pale lb.	.40	.41½	.42½	.40	.45	.38
Red lb.	1.65	1.70	1.80	1.65	2.20	1.70
Rue, Herb, bales lb.	.18	.20	.20	.18	.20	.18
Sabadilla Seed, bags lb.	.29	.30	.34	.29	.35	.30
Powdered, bbls lb.	.35	.36	.39	.35	.38	.32
SAFFRON FLOWERS, American, bales lb.	.34	.39	.40	.34	.40	.29½
Valencia, 1 lb cans lb.	11.00	11.50	12.00	11.00	16.00	11.25
Sage Dalmatian, bales lb.	.05½	.06	.06	.05½	.07	.05½
Greek, bales lb.	.05½	.06	.06	.05½	.06	.04½
Sandarac Gum, 300 lb bbls lb.	.65	.70	.70	.40	.43	.30
Sarsaparilla Root, Honduras, bales lb.	.54	.55	.55	.54	.58	.52
Mexican, bales lb.	.28	.30	.40	.26	.29	.20
Sassafras Bark, Ordinary, bales lb.	.14	.16	.16	.14	.17	.13½
Select, bales lb.	.24	.26	.28	.24	.27	.23
Savory Leaves, bale lb.	.08½	.09	.09	.08½	.10	.07½
Saw Palmetto Berries, bags lb.	.10	.11	.12	.10	.20	.11

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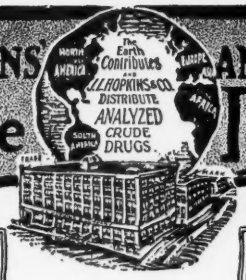

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Monthly Review

Gum Tragacanth Trade Brisk

The general trade in Turkish gum tragacanth was unusually brisk during the month of March, reports Commissioner Erwin P. Keeler, Constantinople. However, local stockholders increased prices considerably thus slackening the demand, which had promised to absorb the entire local stock composed of 111 sacks of the 1927 crop and 328 sacks of the 1928 crop. Arrivals were smaller than expected and not equal to sales transacted.

Imports of gum tragacanth into the United States for the past two years and the first three months of 1928 amounted to 1,434,000 pounds, valued at $756,000; 1,708,000 pounds, valued at $882,000; and 427,000 pounds, valued at $206,500.

Egypt Sends More Drugs

The Department of Commerce reports substantial increase in the quantities and values of gums, waxes, henna, senna, and colocynth pulp exported from Egypt through the ports of Cairo to the United States during the past two years. This increase is shown in the following table:

	1927		*1928*	
	Pounds	*Value*	*Pounds*	*Value*
Beeswax	110,000	$ 43,000	193,000	$ 71,400
Gum arabic	4,652,000	287,000	9,200,000	580,000
Henna	104,000	7,300	198,000	16,000
Senna	1,112,000	71,000	1,172,000	84,000
Colocynth pulp	22,600	6,300	120,000	37,000

Aromatic Imports Larger

Imports of synthetic aromatic chemicals in March, 1929, were much larger than during the same month of 1928 and brought the total for the first quarter of 1929 up to 36,609 pounds. The following table shows imports, entered for consumption, in quantity and value, for the first three months of 1929 compared with the similar period of the preceding year:

	1929		1928	
	Pounds	*Invoice value*	*Pounds*	*Invoice value*
January	5,684	$ 7,850	9,994	$43,876
February	6,756	6,783	15,148	12,608
March	24,169	27,290	9,243	10,285
Total	36,609	$41,923	34,385	$43,876

Exports to Cuba Lower

Exports of medicinals from the United States to Cuba during 1928 were valued at $1,859,000, against $2,117,000, for 1927, or a decrease of $318,000. Nevertheless, Cuba still retains its place as the leading Latin American market for these products and took approximately 20 per cent. of the United States medicinal exports to the Latin American countries and the West Indies, which amounted during 1927 and 1928 to $10,168,000 and $9,942,000, respectively.

Exports of aloes and buchu from South Africa to the United States through the port of Cape Town, which accounts for the bulk of the trade during 1928 showed an increase as follows:

		Pounds	*Value*
Aloes	1927	37,300	$ 2,700.00
	1928	77,000	5,000.00
Buchu	1927	82,630	20,850.00
	1928	125,000	29,700.00

	Current Market	1929 High	1929 Low	1928 High	1928 Low
Scammony Resin, boxes lb.	1.30	1.35	1.30	1.35	1.30
Root, bags lb.	.08½	.08½	.08½	.08½	.08½
Senega Root, bags lb.	1.32	1.35	1.32	1.40	1.27
SENNA ALEX., 150 lb cases lb.	.25	.30	.25	.30	.25
Half leaf 150 lb cases lb.	.12½	.14½	.12½	.15	.13
Sifting, 400 lb bales lb.	.11	.11½	.10½	.11	.10½
Tinnevelly, Bold, 350 lb bales lb.	.16	.18	.16	.20	.15
Medium Leaf lb.	.10	.11	.10	.13½	.09
Small Leaf lb.	.07	.09	.07	.10	.07
Pods, 350 lb lb.	.08¼	.08½	.08½	.13	.08½
Powdered, 200 lb lb.	.....	.11	.11	.10	.11
Serpentaria Root, bags lb.	.68	.71	.65	.77	.70
Shellac, T. N., bags lb.	.57	.58	.57	.58	.57
Simaruba Bark, bales lb.	.20	.25	.20	.38	.08
Skullcap Leaves, Eastern, bales lb.	.....	.40	.40	.40	.33
Western, bales lb.	.18	.19	.18	.26	.18
Skunk Cabbage, Striped, bales lb.	.14	.16	.14	.16	.14
Snake Root, Canada Natural, bags lb.	.27	.28	.24	.30	.24
Canada, Stripped, bags lb.	.55	.....	.55	.55	.55
Soap Bark lb.	.14	.15	.14	.15	.14
Cut, 125-175 lb bags lb.	.14½	.....	.14½	.17	.16
Crushed, 200 lb bbls lb.	.16	.....	.16	.17	.16
Powdered, bbls lb.	.17	.....	.17	.18	.18
Spearmint Leaves, American, bales lb.	.26	.31	.25	.30	.25
Spermaceti, blocks, cakes, cases lb.	.32	.35	.32	.35	.32
Spikenard Root, bags lb.	.18	.18½	.18½	.25	.20
Squaw Vine, bales lb.	.20	.21	.18	.21	.21
Squills, White lb.	.09	.10	.09	.16	.08
Powdered, bulk lb.	.23	.25	.20	.30	.15
Stavesacre Seed, bags lb.	.16	.17	.16	.18	.15½
Stillingia Root, bags lb.	.10	.11	.10	.12	.10
Stone Root, bags lb.	.08	.09	.08	.09	.08
St. Ignatius Beans, bags lb.	.14½	.15	.14½	.15	.14½
St. John's Bread, bags lb.	.....	.09	.09	.14½	.09
STRAMONIUM LEAVES, bales lb.	.18	.20	.18	.20	.16
Seed, bags lb.	.07½	.....	.07½	.07½	.07½
Strophanthus Seed, Kombe, bags lb.	2.00	2.25	2.00	3.00	2.00
Styrax Liquid, Artificial lb.	.26	.35	.26	.35	.26
Genuine, USP lb.	.40	.45	.40	.45	.36
Sunflower Seed, bags Calif lb.	.06	.07	.06	.09	.06
South American, bags lb.	.07	.07½	.07	.07½	.06
Tamarinds, bbls lb.	.05	.05½	.05	.06	.05
Kegs keg	3.85	.....	3.75	3.85	3.85
Tansy, Herb, bales lb.	.15	.16	.16	.11	.14
Thus Gum, 280 lb bbls lb.	.11½	.20	.20	.11½	.20
THYME, Spanish, bales lb.	.08½	.09	.09	.08½	.09
French, bales lb.	.08	.08½	.08½	.08	.08½
Tonga Root, bundles lb.	.42	.....	.42	.42	.55
Vine, bundles lb.	.42	.....	.42	.42	.55
Tonka Beans, Angostura Cases	1.90	2.00	2.00	1.90	2.00
Para cases lb.	.90	.....	.90	.90	.90
Surinam cases lb.	1.25	1.50	1.50	1.25	1.50
Tragacanth Gum, No 1, 100 lb cases lb.	1.45	1.50	1.60	1.50	1.60
No. 2 lb.	1.40	1.50	1.50	1.40	1.50
No. 3 lb.	1.25	1.30	1.30	1.25	1.30
Powdered, 50 lb boxes lb.	1.00	1.10	1.10	1.00	1.10
Turkish cases lb.	.45	.....	.45	.45	.45
Turmeric Root Madras, bags lb.	.08½	.08½	.09	.08½	.12
Aleppy bags lb.	.09½	.10	.10	.09½	.13
Powdered lb.	.13	.15	.15	.13	.15
China bags lb.	.11	.12	.12	.11	.11
Turpentine Venice True, 80 lb cases lb.	.32	.40	.40	.32	.40
Artificial, 80 lb cases lb.	.17	.....	.17	.17	.17
Uva Ursi Leaves, bales lb.	.06	.06½	.06½	.06	.07
Valerian Root, Belgium, bags lb.	.23	.28	.30	.23	.30
VANILLA BEANS, Mex can, whole, cases lb.	3.25	4.00	4.00	3.25	4.00
Cuts, cases lb.	2.62½	2.86½	2.86½	2.50	2.75
Bourbon, cases lb.	2.00	2.50	2.50	1.85	2.75
South American, cases lb.	2.50	2.75	2.75	2.50	2.75
Tahiti, Green, label cases lb.	2.25	2.50	2.50	2.25	2.50
Vetivert Root, 100 lb bags lb.	.25	.....	.25	.25	.30
Violet Flowers, bags lb.	.75	.80	1.00	.68	.90
Wahoo Bark of Root, bags lb.	.50	.51	.56	.51	.62
Bark of Tree, bags lb.	.25	.26	.31	.25	.35
White Pine Bark, Roseed, bags lb.	.07½	.09½	.15	.07	.08
White Poplar Bark, bags lb.	.06	.07½	.07½	.05½	.07
Wild Cherry Bark, Thin, Green lb.	.14	.15	.20	.14	...
Rossed bales lb.	.11	.12	.12	.11	.12
Thick Rossed, bales lb.	.09	.....	.09	.09	.09
Thin Natural, bales lb.	.08	.09	.09	.07½	.08
Thick Natural, bales lb.	.06	.06½	.06½	.05	.06
Wild Indigo Root, bags lb.	.14	.15	.15	.13	.14
Willow Bark, bags lb.	.05	.05½	.05½	.05	.06
White, bags lb.	.15	.....	.15	.15	.05
Witch Hazel Bark, bags lb.	.07	.08	.08	.05½	.08
Leaves, bales lb.	.07	.08	.08	.06½	.....
Wormseed, American, bags lb.	.10	.11	.13	.10	.20
Levant, bags lb.	3.95	4.10	4.15	3.95	5.25
Wormwood, Herb, Imp., bales lb.	.08	.08¼	.10¼	.08	.10¼
Dock Root, bags lb.	.10	.11	.11	.10	.11
Yerba Mate, bags lb.	.18	.20	.20	.18	.20
Santa, bags lb.	.10	.11½	.11½	.09½	.11
Zedoary Root, bags lb.	.07	.08	.08	.06½	.07

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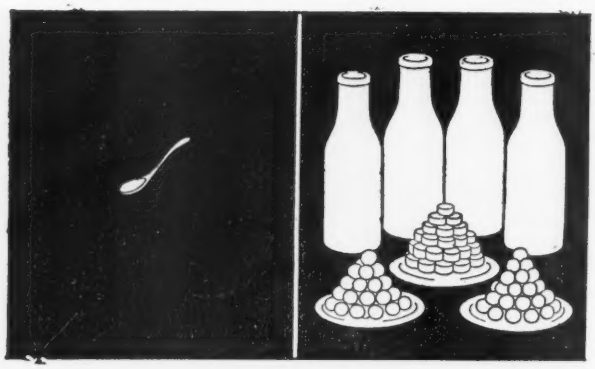

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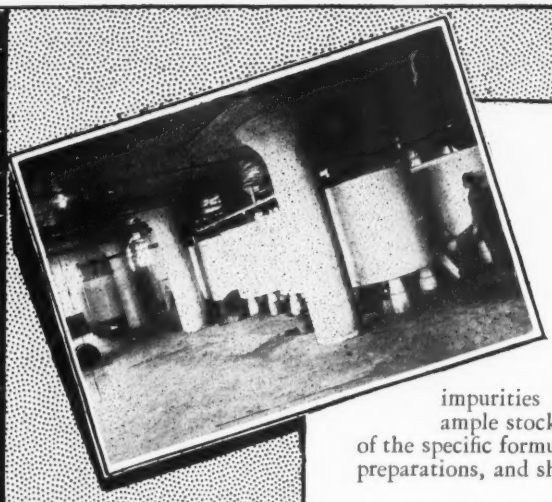

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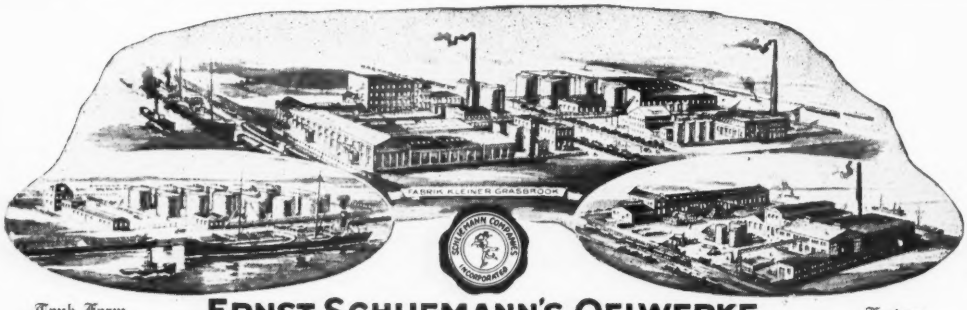

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Jobber Turned Manufacturer

(*Continued from page 546*)

were clamoring to be paid. It was a panic season, and even some of my associates were pretty well convinced we were headed for ruin. Within eight years we were lending money to those same banks."

Big as these manufactured specialties now loom in Mr. Kline's business, they are still a part of the old jobbing house of Smith, Kline & French Company, in fact the line of standard and household preparations for druggists and physicians are sold only within their own jobbing territory. If they come in time to succeed completely—and even Mr. Kline does not forecast the future—they will take the place of one of the oldest wholesale drug firms of Philadelphia. Back in 1841 the establishment of George K. Smith & Co. was founded. In 1863 the firm became Smith and Shoemaker, and two years later Mahlon N. Kline joined the staff as bookkeeper. Within three years he won a partnership and the name was changed to Smith, Kline & Company in 1868. In 1890, upon the winding up of the affairs of another old drug house, French, Richards & Company, Harry B. French became associated and the virtual consolidation of the two largest wholesale houses was consumated in the organization of Smith, Kline & French Company with Mr. Kline as president and Mr. French as vice-president.

South American Industrialization

(*Continued from page 548*)

manufacturing on the ground, the manufacturers who have established branch laboratories in those countries will have a distinct advantage which they will continue to take out largely in a profit way.

American manufacturers who are intensively active in their home markets and who are considering an extension of territory to the foreign markets should not be frightened by the fact that to enter some of these markets they will be forced to manufacture on the ground. If these manufacturers desire foreign trade they can have it if they are willing to go after it. The same fundamental laws apply to doing business in foreign countries and American manufacturers can most always operate at a very satisfactory profit under the conditions that exist in these countries.

Dr. Eric Lowenstein of the Vereinigung, Werke in Germany, arrived here recently and caused quite a stir in scientific circles. Dr. Lowenstein is making his headquarters at Pfaltz & Bauer, Inc., New York.

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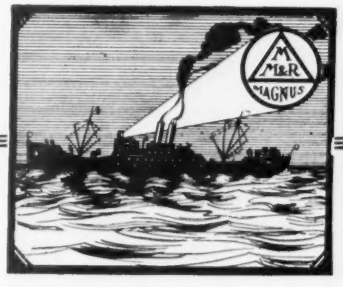

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Antiseptics In The Mouth

(Continued from page 556)

number of micro-organisms and[2] because of the effect of the antiseptic upon the surviving bacteria. The second point has been beautifully illustrated by Allen's studies on pasteurization the efficacy of which he found to be due partly to the effect upon the survivors as well as to the destruction of bacteria. In the case of the oral cavity the use of antiseptics is justified because the reduction of the bacteria retards the production of acid which may in so far as dental caries is concerned, be considered as the toxic principle.

Bacterial reduction in the oral cavity can be obtained by the use of appropriate germicides and they will be effective as has been demonstrated by a number of investigators. Plastridge of Yale University[10] has obtained as high as 99% reduction of the oral bacteria by the use of a dentifrice employed as it would be naturally used in making the toilet of the mouth. Detoxification may be of value but antiseptics will still be the chief weapon of defense against bacterial invasion. Perhaps a combination of the two methods may be of greater value than either used alone. In support of the conjecture is the work of Hansen[11] who found that alcohol reduced the surface tension and increased the effect of certain disinfectants. Feirer and Leonard have developed in hexylresorcinol a preparation which is both an antiseptic and a surface tension depressants thus uniting in a single compound the properties Hansen obtained by using a mixture.

There is evidence both clinical and laboratory, that the use of antiseptics in the mouth to reduce the oral flora is a justifiable procedure and of benefit in checking the progress of dental caries. The theoretically perfect germicide has not as yet been developed, but meanwhile there are antiseptics and combinations of antispetics which may be employed successfully for this purpose if they are carefully selected and due consideration is given to their action upon the types of bacteria comprising the oral flora. The intelligent use of antiseptics in the mouth rests on too sure ground to warrant its abandonment at the present time.

---

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How Grasse Is Maintaining Lead

(*Continued from page 567*)

cochineal (chrysomphalus-dactylopius), which cause considerable damage. Many scientists have sought ways and means to destroy them, but, despite the wonderful results attained, the work must be continued, until an insecticide, effective and simple to use, is found, as those now in existence are often too troublesome to use, or their application too involved.

The hard winters of the last few years have, naturally, directed attention to the various protective measures necessary to save the orange trees from being affected by the frost, such measures being, for example, shelters, hardy plants, artificial heat, etc.

With regard to jasmine, one of the principal problems is the fight against a sort of rot. The plantations have, in fact, been devastated by a kind of mushroom (demaphora netatrix) which has placed the jasmine in the same state as the grape vines were when the phylloxera first attacked them. It is, therefore, requisite to find some fungicides, or some hardy plants, able to resist the disease, and which may serve as graft-supports.

The rose in the Grasse region is actually in danger at the present time. It is an indisputable fact that lack of selection and degeneration have considerably diminished the yield. In view of the competition of countries like Bulgaria and Italy, it is essential that the yield per year be increased, by every means within our power. Although the rose of Grasse has a delicacy not obtainable elsewhere, due to conditions of climate and soil, still its cost price must not be raised too high as compared with essential oils, for the reason that it could then be replaced simply because the price was prohibitive.

Of course, the establishment of the Garden for Experimental Research is of particular interest to the region it serves, but if the grower or producer of flowers is constantly forced to the wall, the manufacturing perfumers, as users of essential oils, are involved to the extent of not wanting to see these essential oils raised to exaggerated prices. One might, perhaps, invoke protection along artificial means, such as high customs tariffs, production bonuses or premiums. However, it is always bad policy to pay the grower more for his flowers than they are actually worth, for the reason that he would only suffer the consequences if an adjustment in the market price were made to bring it to normal. It is, therefore, much better to help him increase the yield, by adopting more improved methods of cultivation, that to inflate the prices. That is the view of those contributing to the work of the Garden for Experimental Research.

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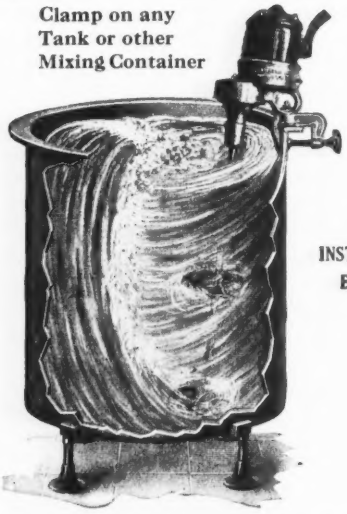

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while traveling on the French Riviera, would do us the honor of visiting the Garden for Experimental Research, will be welcomed to an institution that is doing everything it possibly can for the perfume industry as a whole.

An organization of this character deserves the moral support of every one in the perfume industry, for it is helping to preserve the charm of Grasse and the surrounding country. If our floral beauty were to disappear, to be replaced by the sugar beet or lucern much of the attractiveness of the Cote d'Azur would go with it.

Here, in this section, we find a rare combination: beauty, economics, flowers and factories, all bound together in one harmonious fabric. Thus, in working to improve the agricultural and industrial prosperity of Grasse, the Garden for Experimental Research is helping to preserve this beautiful "city of flowers and perfume" to be enjoyed by our visitors, for, as Keats tells us in his poem Endymion, "A thing of beauty is a joy for ever."

New Incorporations

Parfumerie Lubine, New York. Toilet articles. Capital $50,000.

Trafton Cosmetics, New York. Capital $10,000.

B. U. T. Toileteries, New York Cosmetics. Capital $10,000.

Riverside Laboratories, New York. Chemicals. Capital 200 shares common.

Thoro Chemical Co., New York. Drugs, medicines. Capital 100 shares common.

Gastrical Co., New York. Drugs, medicines. Capital $20,000.

Airpack, New York. Chemicals. Capital 1,000 shares common.

Atiska Products, New York. Chemicals. Capital $10,000.

Hospital Products Corp. of America, Wilmington, Del. Delaware charter. Chemicals. Capital $250,000.

Idinol Corp., New York. Delaware charter. Chemicals, drugs. Capital $25,000, 1,000 shares common.

Bost, Inc., Dover, Del. Delaware charter. Toilet articles. Capital 50,000 shares common.

Harris Cosmetic Co., Newark, N. J. New Jersey charter. Deal in cosmetics. Capital $100,000.

Helco Corp., New York. Chemicals. Capital 150 shares common.

Modern Drug Co., Inc., Wilmington, Del. Delaware charter. Drugs, physicians' and hospital supplies. Capital 1,000 shares common.

Morton Laboratories, New York. Cosmetics. Capital $50,000.

Dee Em Laboratories, New York. Drugs. Capital $20,000 pf, 300 shares common.

Saniroluxe Corp., New York. Toilet articles. Capital $20,000.

Willott Chemical Co., New York. Capital $20,000.

Bell Allied Products Corp., Wilmington, Del. Delaware charter. Chemists, druggists, drysalters. Capital $250,000, 55,000 shares common.

Max Factor, Inc., Dover, Del. Delaware charter. Creams, skin bleaches. Capital 11,000 shares common.

Ellis Research Laboratories, Inc., Philadelphia, Pa. Delaware charter. Medical, surgical, diagnostic instruments. Capital 1,000 shares common.

Edelon Beauty Preparations, New York. Cosmetics. Capital $10,000.

Glandol Corp., New York. Cosmetics. Capital $10,000.

Patents Issued

(*Continued from page 571*)

Vitamin Preparation

These preparations are made by extraction of dry or fresh, vitamin-containing plant parts with alcohol or similar organic liquids. An insufficient amount of alkali hydroxide is added to the extraction liquor to accomplished complete saponification of the fats in the plant parts. A. W. Owe, Oslo, Norway, German Patent No. 468,301, filed Nov. 4, 1924.

Ampulles

The ampulles are made so that they contain several chambers holding various substances, which are allowed to mix together when the separating walls are broken through, without the ampulle being opened up to the outside. The partial containers are under a vacuum, so that the mixing of the ingredients does not have to contend with air resistance, and the contents of the ampulle both during and after mixing are removed from the influence of air and the oxygen in air. Deutsche Rotawerke G. m. b. H., Aachen, Germany. German Patent No. 467,176, filed Dec. 17, 1925.

Bactericidal and Fungicidal Medium

This is made by treating waste cellulose liquors with halogens or substances which evolve halogens. Koenigsberger Zellstoff Fabriken and Chemische Werke Koholyt A. G., Berlin, and Dr S. Hilpert, Berlin-Wannsee, Germany. German Patent No. 467,265, filed Oct. 22, 1922.

Foreign Abstracts

Critical Examination and Evaluation of Balsam Peru

The author concludes from investigation that it is possible to determine by methods in use to-day between the artificial and the true Peru balsams, when they do not respond to definite characteristics. It is, however, possible to miss finding the adulterated product for the reason that the manufacturer is in the position to imitate Peru balsam with the aid of a certain manufactured product, so that it becomes very difficult to tell between this product and true Peru balsam. It is, therefore, essential that the chemist carry out a number of tests on the product and make certain quantitative determinations as well before he reaches a conclusion as to whether or not the Peru balsam he is examining is pure or not. The complete examination of the Peru balsam comprises the following tests:

1. Examination of the color and of the odor.

2. Qualitative tests for detecting artificial balsam. These are as follows:—testing with nitric acid, testing with petroleum ether (very important), testing with concentrated ammonia, ether, carbon disulphide, alcohol, iron chloride, sulfur trioxide, sulfuric acid, formation of an emulsion on agitating with ammonia, the blue Mueller-Dieterich coloration, the cinnamine reaction with sulfuric acid, the reaction of the balsam with ether and sulfuric acid and the formation of a colored ring when agitating with sulfuric acid.

3. Qualitative tests made with the idea of detecting the presence of adulterants. The principal products which are used in adulterating Peru balsam are Tolu balsam, copaiba, gurjun, Canada balsam, styrax, rosin, alcohol, oils, turpentine, benzoin, rosin oil and water.

4. Quantitative analysis. This consists of the determination of the specific weight, of the viscosity, of the acid coefficient, of the index of saponification. The most important consideration is the weighing of the cinnamine (which is the sole active constituent of Peru balsam from the therapeutic standpoint). This can be done by determining the index of esterification of the cinnamine. Finally, it is also advisable to determine the iodine coefficients of the balsam and of cinnamine. W. Schneiter, Pharm. Acta Helv., volumes 2 and 3.

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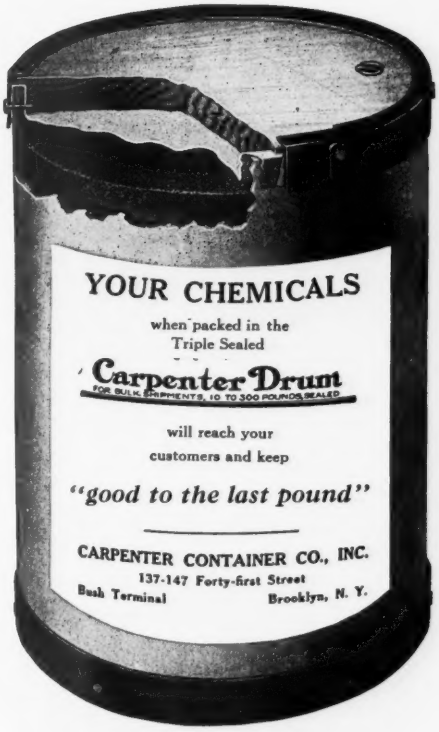

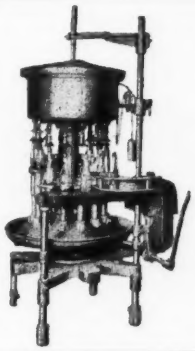

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June 1929

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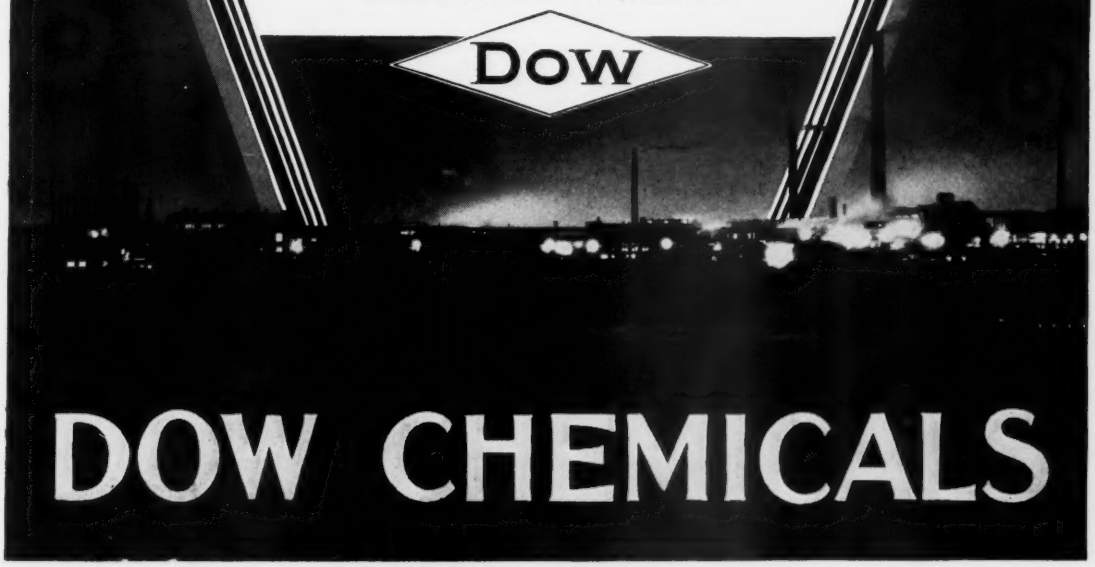

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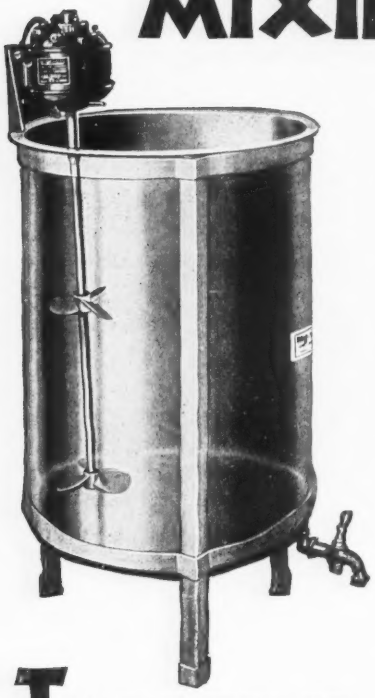

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